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INSTRUMENTATION, APPARATUS, AND LABORATORY MATERIALS

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Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS of any products or materials mentioned is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Reader Service Card and placing it in a mailbox. U.S. postage is free.

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INSTRUMENTATION, APPARATUS, AND LABORATORY MATERIALS

NEW PRODUCTS

DISPOSABLE FILTERS FOR CELL SUSPENSIONS

CellTrics are disposable filters for separating cells and nuclei from aggregates and debris in cell suspensions. The filters are color-coded in five mesh diameter sizes of 20, 30, 50, 100, and 150 Bio-Ergonomics For more information call 800-350-6466 or circle 141 on the Reader

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650-697-3600 or circle 143 on the Reader Service Card linker arm into the nucleic acid. The fluorescent Texas Red label is covalently attached to the nucleic acid via the FastTag linker arm. Applications for the labeled nucleic acids include in situ hybridization, Southern and Northern blot hybridization, polymerase chain reaction amplification, and colony and plaque hybridization.

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vides such capabilities as three-dimensional surface plots, histograms, linear profiles, and a variety of annotation tools. The camera-based version acquires fluorescent images, and an optional white light imaging source can be used for stained gels, blots, and autoradiograms. The scanner-based system acquires, documents, and analyzes white light applications such as autoradiographs and stained gels.

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POSITIONS OPEN

TENURE-TRACK. Biochemistry. The Department of Biochemistry at the University of Vermont seeks to fill a full-time (12-month appointment), tenure-track faculty position at ANY PROFESSORIAL LEVEL. Applicants with a commitment to graduate/medical student educa-tion, collaborative research interactions with University faculty, and a vigorous independent research program are encouraged to apply. Individuals with postdoctoral re-search experience and an interest in cellular/subcellular processes will be given special consideration. The individual's research must be based upon fundamental biochem-ical approaches and principles, with an emphasis on using biochemically characterized systems and at least partially purified macromolecular components. Preference will be given to applicants working in one of the following areas: (1) protein processing and trafficking; (2) chromatin structure and remodeling; (3) organelle development; (4) protein-protein interactions in signal transduction processes; or (5) cell motility. The Department, located within the College of Medicine, has strong interactions with allied departments and is an active participant in institutional teaching and research programs in the areas of cancer biology, cell and molecular biology, thrombosis and hemostasis, pulmonary biology, and biotechnology. The 425-acre main campus of the University of Vermont is located beside Lake Champlain, between the New York Adirondack and Vermont Green Mountains, and resides within a community of about 100,000 people. Interested individuals should send a résumé, a description of career goals and research interests, and names of three references to: Dr. George L. Long, Chairman, Search Commit-tee, Department of Biochemistry, College of Medi-cine, University of Vermont, Burlington, VT 05405. The closing date for applications is December 18, 1998 The University of Vernont is an Affirmative Action/Equal Op-portunity Employer. Women and people of diverse racial, ethnic, and cultural backgrounds are encouraged to apply.

FACULTY POSITION • RICE UNIVERSITY Department of Biochemistry and Cell Biology

Applications are invited for a tenure-track faculty position in cell and developmental biology of an animal, microbial, or plant systems. Candidates must have completed a Ph.D., have postdoctoral training, exhibit outstanding communication skills, and have a record indicating significant potential in research and teaching. The successful candidate will be expected to develop and maintain a vigorous research program supported by extramural funding and participate in graduate and undergraduate teaching. Emphasis in recruiting will be at the **ASSIST-ANT PROFESSOR** level, but highly qualified candidates at other levels will also be considered. Review of submitted applications will commence on November 1, 1998, and continue until the position is filled. Please send letter of application, curriculum vitae, summary of past research, and statement of future research plans, and ararange for four letters of reference to be sent to:

Faculty Search Committee Department of Biochemistry and Cell Biology Rice University, MS-140 P.O. Box 1892 Houston, TX 77251-1892

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FACULTY POSITION IN CELL BIOLOGY

The Department of Cell Biology at Duke University Medical Center is seeking applications for **TENURE**-**TRACK** faculty positions from interested candidates. Successful candidates with Ph.D., M.D., or equivalent with significant postdoctoral experience and/or active research programs will be considered at ALL RANKS. We seek individuals who will establish or have outstanding, vigorous research programs investigating questions relevant to modern physiology at the molecular, cellular, or organismal level and who will participate in graduate and medical education. For more information about the department, see our website: http://note.cellbio.duke. edu. Send a complete curriculum vitae, a brief description of research interest, and the names, addresses, telephone and FAX numbers, and e-mail addresses of three reference es to: Faculty Search Committee, Department of Cell Biology, Box 3709, Duke University Medical Center, Durham, NC 27710. Deadline for application is October 15, 1998.

Duke University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS CELL, DEVELOPMENT, AND NEUROBIOLOGY Emory University School of Medicine

The Department of Cell Biology (website: http:// www.emory.edu/CELLBIO/) invites applications for tenure-track positions at the ASSISTANT and ASSO-CIATE PROFESSOR levels. The Department and School of Medicine are under new leadership and are greatly expanding their research programs and laboratory facilities. Four new faculty joined the Department within the past two years. Additional Investigators are being sought who apply molecular approaches to problems in cell biology, development, or neurobiology, using diverse systems that complement the broad spectrum of interests in the Department. Faculty participate in strong interdepartmental graduate student training programs and have outstanding opportunities for collaborative research. The School of Medicine is located on Emory's main campus, in a desirable residential community within minutes of the many cultural and recreational opportunities of Atlanta and Georgia.

Send curriculum vitae, a brief description of the proposed research program, representative reprints, and the names and addresses of three references to:

Barry D. Shur, Ph.D. Department of Cell Biology Emory University School of Medicine 1648 Pierce Drive, Room 100 Atlanta, GA 30322

Applications should be received by December 1, 1998, to receive full consideration.

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TWO TENURE-TRACK FACULTY POSITIONS GRADUATE CENTER FOR TOXICOLOGY UNIVERSITY OF KENTUCKY

We are seeking applicants for two positions at the level of **ASSOCIATE** or **ASSISTANT PROFESSOR** in the areas of (1) environmental chemicals, oxidative stress, and neurodegenerative diseases and (2) molecular mecha-nisms of carcinogenesis and DNA damage and repair. The Graduate Center for Toxicology is one of 11 graduate programs at the University of Kentucky to receive a Research Challenge Trust Fund award to enhance the University's strongest research and graduate programs and thus increase the standing of the University among the nation's leading public research universities. Proposed areas of growth in toxicology will build on current research strengths in neuroscience, aging, and cancer at the University. Additional information is available at website: http://www.mc.uky.edu/toxicology. Successful candidates will be expected to maintain an independent and vigorous research program and participate in the Center's graduate programs; candidates for Associate Professor must demonstrate an established research program and funding base. Applicants must possess a Ph.D. or equivalent, and have completed at least two years of postdoc-toral training. Send a curriculum vitae, brief summary of current research with a statement of future research direction and names of at least three references to: Dr. Mary Vore, Faculty Search Committee, Graduate Center for Toxicology, 306 Health Sciences Research Building, Chandler Medical Center, Lexington, KY 40536-0305. The search committees will begin reviewing applications by October 15, 1998, and will continue until the positions are filled. We encourage applications from underrepresented groups, including minorities, women, and people with disability.

FACULTY POSITIONS IN IMMUNOLOGY AND GENETICS

Virginia Mason Research Center (VMRC) is recruiting faculty to join our growing programs in immunology, diabetes, and genetics. Construction of a new laboratory research facility provides opportunities for innovative new or established Investigators who can contribute strong research programs in an interactive environment with extensive core facilities.

Applicants should send statement of research interests, curriculum vitae, and list of references to: Gerald T. Nepom, M.D., Ph.D., Director, Virginia Mason Research Center, 1000 Seneca Street, Seattle, WA 98101. Further information on VMRC programs can be found at website: www.vmmc.org/vmrc. Please respond by October 15, 1998. VMRC is an Equal Opportunity Employer.



EUKARYOTIC MOLECULAR BIOLOGIST/GENETICIST

The Department of Biology invites applications for a new tenuretrack assistant professor position in molecular biology/genetics with primary focus on eukaryotes starting August 1999. Teaching responsibilities include courses in molecular genetics, introductory cellular biology and genetics, and a course in the area of specialty. Contributions to advanced courses in relevant portions of cellular physiology/biochemistry and developmental biology are expected. Knowledge of radioisotope applications in molecular biology is desired. The appointee is expected to establish an ongoing research program and to provide research opportunities appropriate for undergraduate participation. Postdoctoral experience is preferred and previous teaching experience is highly desirable. The successful candidate will participate in the design of new teaching and research laboratories and equipment acquisition for our anticipated new and renovated science facilities. Letter of application should describe teaching interests, teaching philosophy, and scholarly plans. Application Deadline: October 15, 1998. Search Chair: Dr. Harry Wistrand, Chair, Department of Biology.

Women's Studies

The Women's Studies Department invites applications for a tenuretrack position in women's studies, starting August 1999. Candidates should be able to teach the introductory course in women's studies, a course in feminist theory, and other women's studies courses in the candidate's area of expertise, in addition to being prepared to direct the Program in Women's Studies. The successful candidate will also teach in one of the other liberal arts disciplines taught at the College. One possible discipline for this affiliation is biology. The appointment will be at the rank of assistant or associate professor. Candidates should have teaching and research experience in women's studies. Application Deadline: December 1, 1998. A dossier or three letters of reference should accompany letter of application and C.V. Search Chair: Professor Katharine Kennedy, Director, Program in Women's Studies, Campus Box 732.

APPLICATION PROCESS

Unless otherwise noted in a specific ad: Candidates are expected to have completed the Ph.D. by July 1, 1999. To ensure full consideration, applications should be received by the deadline listed in each specific ad. Send letter of application; curriculum vitae; and names, addresses and telephone numbers of three professional references to search chair listed for each specific ad.

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Faculty Positions in Structural Biology University of Texas–Houston Medical School

The Department of Biochemistry and Molecular Biology at the University of Texas-Houston Medical School announces the establishment of an initiative in Structural Biology and invites applications for faculty positions at all ranks (assistant, associate, and full professor). Given the expertise already present, the new initiative will focus on the development of X-ray crystallography. Applicants should have strong credentials in X-ray crystallographic research and mid-career and senior scientists should have well-funded research programs. Successful applicants will be expected to develop and maintain productive independent research programs, and participate in the teaching and training activities of the department. The incentives accompanying this initiative include a significant annual budget to support Structural Biology research programs, endowed Chairs for senior faculty appointments, and development funds to purchase needed equipment. Faculty will hold tenuretrack academic appointments in the Department of Biochemistry and Molecular Biology. Ongoing faculty recruitment and research development in Biochemistry and Molecular Biology are expected to enhance the research goals of the Structural Biology initiative. The deadline for applications is December 1, 1998. Interested individuals should submit a curriculum vitae, the names and addresses of three persons from whom letters of reference might be obtained, and a summary of future research directions to: Dr. Henry W. Strobel, Chair, Structural Biology Search Committee, Department of Biochemistry and Molecular Biology, University of Texas-Houston, Medical School, P.O. Box 20708, Houston, TX 77225-0708. Our home page is: http://www.bmb.med.uth.tmc.edu/; Equal Opportunity Employer; women and minorities encouraged to apply.

PENNSTATE College of Medicine ASSISTANT PROFESSOR. INSTRUCTOR.

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Mrs. Barbara A. Brown Administrative Assistant Henry Hood Research Program (KMB) Sigfried and Janet Weis Center for Research 100 North Academy Avenue Danville, PA 17822-2601

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Immunology

A position is available to investigate the role of Integrins and Disintegrins (ADAMs) in angiogenesis and inflammation. The candidate will be involved in studies of the structural basis of integrin/ligand interactions and the molecular mechanism of integrin mediated signaling. The individual should have experience in molecular and cell biology methods, a background in Integrin biology would be useful. See Mol. Biol. Cell 8:501-515; J. Exp. Med. 183:1247-52 (1996). Manager: Dr. Sarah Bodary. Job code SCI1847.

Molecular Oncology A postdoctoral position is available to study the Sonic Hedgehog signal transduction pathway. Background in molecular and cellular biology with emphasis on signal transduction and/or developmental biology is preferred. See Nature 391:90-92 (1998); Nature 384:129-134 (1998). Manager: Dr. Fred de Sauvage. Job code SCI1758.

Molecular Oncology A postdoctoral position is available to study the control of apoptosis by novel members of the tumor necrosis factor receptor and ligand families. Candidates should have a recent PhD in molecular biology, cell biology, or biochemistry and preferably some practical experience in the field of apoptosis. See Curr. Biol. 6:1669(1986); Curr. Biol. 7:1003 (1997); Curr. Biol. 8:525 (1998); Science 277:818 (1997); Science 281:1305 (1998). Manager: Dr. Avi Ashkenazi. Job code SCI1867.

Molecular Oncology

A position is available to research structure-function studies of ErbB receptor-ligand interactions and their relevance to human cancer. Prefer PhD in molecular biology or biochemistry possessing strong molecular biology skills. See: J. Biol. Chem. 273:11667-74; Oncogene 15:1385-1394 (1997). Manager: Dr. Mark Sliwkowski. Job Code SCI612.

Molecular Biology This postdoctoral position will provide the opportunity to probe the function of novel secreted proteins in the context of a functional genomics effort. An area of research interest will include the identification of novel receptor-ligand interactions. Analysis will include, where appropriate, use of transgenic/knockout animal models. See Nature Biotech. 15:768-771 (1997); Science 277:818-821 (1997); Stem Cells 14 (suppl.1):116-123 (1996); Proc. Natl. Acad. Sci. (USA) 92:5292-5296 (1995) Science 265:1445-1447 (1994). Manager: Dr. Austin Gurney. Job code SCI777.

Molecular Biology

This postdoctoral position will provide the opportunity to exploit existing genomic technologies to identify novel secreted proteins. In addition, original approaches to the identification of novel secreted genes in genomic DNA will be developed. The focus of this work will be the prediction of novel secreted proteins from primary genomic sequence data and the use and design of bioinformatics tools. The ideal candidate will have a PhD in molecular biology or related field with 0-3+ years' experience in the area of genomics and the extraction of information from genomic sequences. See: PNAS 93:7108-7113 (1996). Manager: Dr. Audrey Goddard. Job Code SCI174.

Cardiovascular Research

This postdoctoral fellowship will investigate the regulation of blood vessel growth by vascular endothelial growth factor (VEGF) and by novel factors applying molecular, cellular and in vivo approaches. Requires a strong background in molecular biology or cellular biology. See Nature 362:841-844 (1993); Nature 380: 439-442 (1996); EMBO. J 15:4919-4927 (1996); Endocr. Rev. 18:4-25 (1997); Nature Med. 3:336-340 (1998). Manager: Dr. Napoleon Ferrara. Job Code SCI033.

Neuroscience

A position is available in the area of developmental neurobiology for an outstanding post doctoral fellow. The successful candidate will utilize advanced molecular, cellular and genetic approaches to identify and study genes that control commitment and differentiation in the central nervous system. See Cell (1995), 80:95; Nature (1995), 373:339; Science (1995), 267:455; Nature (1996), 384:126; Nature (1996) 382:80; Nature (1996), 382:76; Nature (1997), 387:717; Neuron (1997), 19, 15-26; Nature (1998) 391:90; Neuron (1998) 19, 15-26; Cell (1998) 93, 755-766. Manager: Dr Arnon Rosenthal. Job Code SCI225.

Bioorganic Chemistry and

Immunology Research This postdoctoral fellowship will focus on protein structural analysis and design in the application of re-engineered proteins to small-molecule drug discovery. Requires a Ph.D. degree in Chemistry or Biochemistry with an emphasis in peptide and protein structural analysis. Experience in biophysical chemistry, molecular biology, protein chemistry or peptide synthesis is desirable. See Science 260:1937-42 (1993); J. Amer. Chem. Soc. 116: 5069-83 (1994); J. Immunol. 157:4986-4995 (1996); Biochemistry 36:4775-4781 (1997); J. Med. Chem. 40:3359-68 (1997). Managers: Dr. James Marsters and Dr. Leonard Presta. Job Code: SCI078.



Bio-Organic Chemistry

A postdoctoral position in Solid Phase Organic Sysnthesis is available to focus on the adaptation of solution chemistries relevant to in-house biological targets to the solid support. This will likely include the preparation and characterization of novel resin linkages along with library design and data analysis to characterize ligands binding interactions. This research will be aided by state of the art instrumentation including FT NMR with MAS and an Argonaut Nautilus 2400 automated organic synthesizer. The ideal candidate will have a recent Ph.D. in organic chemistry, four to five years of wet chemistry experience, hands on experience with FT NMR and other modern physical organic characterization techniques. See J. Amer. Chem. Soc., 114:9245 (1992); J. Amer. Chem. Soc., 116:5069-5076 (1994); J. Amer. Chem. Soc., 116:5077-5083 (1994). Manager: Dr. Tom Gadek. Job code SCI072.

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At Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. Our continuing, unprecedented growth creates an excellent opportunity for an innovative, organized and highly motivated scientist. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an expanding multidisciplinary group focused on studies of airway disease.

SCIENTIST Pulmonary Research

As a member of our Department of Allergy, you will join a group of scientists working on different aspects of lung function with the goal of developing models of airway disease. You will also work with other scientists on projects that involve *in vivo* measurement and characterization of lung function. To qualify, you will need a BS degree in Animal Physiology or a related discipline and 2 years of *in vivo* experience. An MS degree and experience in pulmonary research are highly desirable.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume which MUST reference Dept. HB-DD8108-RC and salary requirements to: Human Resources-HB, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. Please visit our web site at **http://www.sp-research.com** for additional information. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



The Reuter Foundation invites applications for the Reuter Fellowship in Medical Journalism at the Columbia University Graduate School of Journalism

This award is for professional journalists who specialize in writing or broadcasting stories about medical issues, and who would benefit from a sustained period of study and research using the resources of Columbia University and nearby medical institutions. Candidates should have at least five years of medical journalism experience to be eligible for this fully funded fellowship in the spring semester of 1999.

Further information and application forms may be obtained by writing to:

Reuter Fellowship in Medical Journalism Columbia University Graduate School of Journalism 2950 Broadway, Mail Code 3806 New York, NY 10027 Phone: 212-854-3862 Fax: 212-854-7837 E-mail: mgh2@columbia.edu

Application Postmark Deadline: October 15, 1998

Columbia University takes affirmative action to ensure equal opportunity.

Albany Medical College Professor and Co-Director Molecular Basis of Disease

In association with an expansion in biomedical research and graduate research training in selected interdisciplinary thematic areas of research, Albany Medical College announces the availability of a senior, tenured position as Professor with administrative responsibilities to codirect a new Interdisciplinary Research Group in Molecular Basis of Disease. Scientists with a Ph.D., M.D., or M.D.-Ph.D. currently at either the Associate Professor or Professor level are invited to apply. Applicants must have a track record of research excellence, NIH grant funding, and experience in mentoring graduate students or postdoctoral fellows. Ideal candidates should have expertise in either viral microbial pathogenesis, immunology, molecular genetics, microbial metabolism, immunopathology, or cancer biology. Departmental academic appointment can be in a basic science or clinical department.

Expansion of the College's research and scientific training programs coincides with funding of the Medical Center's new Institutional Strategic Research Plan by the Board of Directors designed to expand the size of the research faculty; develop core research support facilities; increase our basic and clinical research programs; and restructure the Ph.D. training programs in selected interdisciplinary areas. Other interdisciplinary thematic areas of emphasis include Vascular Biology; Neuropharmacology and Neuroscience; as well as Cell and Molecular Biology. Thematic areas of research will provide the foundation for interdisciplinary predoctoral and postdoctoral training programs. Interactions between the Interdisciplinary Research Groups and Clinical Centers of Excellence are projected. Excellent opportunities exist for joint collaborative research efforts with the Wadsworth Center at the New York State Health Department.

The research interests of the current faculty in the Interdisciplinary Research Group include microbial metabolism, microbial molecular pathogenesis, DNA damage and repair, oxidative stress, antigen presentation, nucleic acid structure and gene expression, Cell cycle control, antibacterial drug resistance, as well as liver and breast cancer. The candidate selected will have an opportunity to recruit additional tenure-track faculty to the research group.

Applicants should submit curriculum vitae and a letter of intent to: Thomas M. Saba, Ph.D., Senior V.P. for Research, Box A-134, Albany Medical College, Albany, NY 12208. Internal selection process will begin in October.

An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

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...of drug development research with DuPont Pharmaceuticals Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals. We have immediate openings at our facilities in Wilmington, DE for the following:

Research/Senior Research Scientist

We are looking for a bioinformaticist who will be responsible for the characterization of protein/nucleotide sequences with GCG tools, database searches using BLAST, FASTA, etc., to i dentify novel genes and to classify and update information on gene targets involved in drug development. This position requires a thorough understanding of molecular biology and the use of bioinformatics tools; working knowledge of HTML and Perl; the ability to handle multiple projects and excellent written and verbal communication skills. Familiarity with RDBMS is a plus. Ph.D. in Molecular Biology or related field with minimum 5 years experience with sequence analysis software and molecular biological techniques. **Code: EG-KA/BIOINFO**

Staff Scientist

We have an opening for a database application developer to design and build database applications and graphical user-interfaces to query and display biological and genetic data using Oracle, MS Access and Web technologies. You will work with a team of molecular biologists to develop applications that access information from a proprietary integrated drug discovery database. This position requires a B.S. in Computer Science with at least 2 years experience developing professional grade software; experience building web-based Oracle applications; user-interfaces using Oracle Web Server, Java, SQL, JDBC, HTML; building MS Access databases; excellent communication and teamwork skills as well as the ability to work independently. Formal training in biology or chemistry is a plus. Code: EG-KA/DD

Staff Scientist

We are looking for a candidate who can fill the role of laboratory information management systems support and will be responsible for the implementation of robotic and data acquisition hardware and software. You will work with a team of molecular biologists to automate various laboratory procedures requiring knowledge of software engineering and configuration management. Additionally, you will be involved in linking the data to a multiuser database system. This position requires a B.S. in Computer Science, or related field with 3 years experience. Required ability/ experience in the following areas: design/ implement software and support libraries to control laboratory instruments and acquire data from sensors in lab applications; C, C++ and Visual Basic programming languages; real-time control and data acquisition systems; develop interface and driver software from I/O level specifications of scientific instruments and peripherals; TCP/IP programming and inter-applications communication; developing software for Windows NT and UNIX environments; strong math skills (geometry; trigonometry, linear algebra as encountered in 2D and 3D computer graphics); familiarity with RDBMS; excellent communication and organizational skills. Code: EG-KA/LIMS

Associate/Staff Scientist -CNS Disease Research

We have two positions open for individuals having experience with pharmacological/biochemical techniques used to study signal transduction mechanisms such as radioligand binding techniques, second messenger assays, calcium imaging, immunocytochemistry, Western blotting, radioimmunoassays, and chromatographic techniques. Experience with tissue culture is desired. Excellent oral and written communication skills are required, along with the ability to work as part of a highly interactive and multidisciplinary drug discovery team. BS/MS in the life sciences or related discipline with a minimum of 2-3 years experience in an academic or industrial laboratory is required. **Code: SD-LF**

Staff Scientist - Antimicrobials Research

The ideal candidate will assist in developing biochemical and microbiological assays to examine the mechanism of action of antifungal agents and identify/evaluate novel agents and targets. The candidate must have a working knowledge of microbial physiology and biochemistry, plus laboratory experience in molecular microbiology, biochemistry, and assay development, as well as good oral and written communication skills. A BS/MS in Biochemistry, Molecular Biology, or Microbiology is required. **Code: SD-ND**

DuPont Pharmaceuticals Company can offer you an excellent compensation and benefits package. To be considered, please forward your resume to: DuPont Pharmaceuticals Company, Human Resources-(Code), 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer, M/F/D/V.

DU PONT PHARMA

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THE STRENGTHS OF SERONO

ARES ADVANCED TECHNOLOGY, INC. the U.S. R&D arm of the Ares Serono Group, employs state-of-the-art methods in High Throughput Screening, Combinatorial Chemistry, Experimental Pharmacology, Mammalian Cell Recombinant DNA technology, and Differential Gene Expression to discover and evaluate new biopharmaceutical agents of clinical importance. The exciting, on-going success of our product portfolio, fueled by a \$175 million annual investment in R&D, means that Ares Advanced Technology can offer you what no other Biotechnology company can - Innovative Products - Full Integration - Financial Stability - Enterprenuerial Environment - The Best of Biotech.

We are expanding our research efforts in Reproductive Endocrinology to explore the full range of areas in Reproductive Health. This represents a unique opportunity for outstanding professionals to make an immediate contribution and impact to this Department. We are especially interested in candidates with expertise in molecular and cellular aspects of Follicle Biology, Implantation, Embryology, Uterine Biology, or signal transduc-tion in response to glycoprotein hormones. Available positions include:

DIRECTOR - REPRODUCTIVE ENDOCRINOLOGY

You will lead a research group conducting drug discovery and feasibility research in new reproductive endocrine areas. Specific responsibilities include playing a leadership role in the conception, initiation, coordination, and implementation of innovative research programs to identify and validate new drug discovery targets/candidates; coordinate department research activities within a matrix management system and participate in the evaluation and selection of new areas of discovery research. To qualify, you must have a Ph.D and/or M.D., or equivalent in a biological science, with at least 10 years of combined industrial and academic experience in areas relevant to Reproductive Endocrinology. A strong record of independent scientific achievement in Reproductive biology is essential, as evidenced by prior multi-disciplinary approach to discovery. Excellent communications skills and supervisory/management experience required. Job Code: 98-03

PRINCIPAL/SENIOR PRINCIPAL INVESTIGATORS

Openings exist for highly motivated professionals to initiate a research program, and participate in a multi-disciplinary research effort aimed at identifying potential drug candidates/targets in relevant Reproductive disease states. To qualify, you must have a Ph.D. in a Biological Science, plus at least 1 - 3 years of industrial or academic experience in the area of Reproductive Endocrinology. Excellent communications skills are essential. Expertise in molecular and cellular aspects of Follicle Biology, Implantation, Embryology, Uterine Biology, or signal transduction is highly desirable. Job Code: 98-04

BIOINFORMATICS SPECIALIST

Dynamic, highly skilled professional to work on leading edge projects in the exciting area of Bioinformatics. You will assist in the identifica-tion of novel genes through GeneChip Analysis from Differential Gene Expression experiments, plus contribute to computational generations and proteomics programs in Reproductive Endocrinology, assessing and identifying novel genes and proteins through the use of in-house software and publicly available databases and algorithms. You will also develop software and databases, and conduct seminars on Bioinformatics tools available within our organization. Qualifications include a Ph.D. or equivalent experience in a scientific discipline, plus 4 - 6 years of computer-related experience. Genomics/ Proteomics background required, as is Bioinformatics experience in Differential Gene Expression. Job Code: 98-06

For consideration, please forward your CV, indicating Code, to: Ares Advanced Technology, Inc., Attn: Monica Fox, 280 Pond Street, Randolph, MA 02368. E-mail: monica.fox.us_bos03@serono.com An Equal Opportunity Employer.



McMaster University Tenure-Track Faculty Positions in Molecular Biology

McMaster University, a research-intensive institution and leading center for biomedical and biological research, is expanding its faculty complement in the area of molecular biology. Two tenure-track faculty positions are available at the assistant professor level commencing July 1, 1999. These positions are tenable in the Biochemistry and Biology Departments; new faculty will become members of the Institute for Molecular Biology and Biotechnology.

We request applications from individuals with research interests in molecular biology, who employ model organisms to study gene function. Their research areas should complement current strengths at McMaster University in the fields of gene structure; expression and regulation; DNA replication and repair; signal transduction; oncogenesis; gene therapy; development and differentiation; and microbial genetics and pathogenesis.

Candidates must hold a Ph.D. degree in molecular biology or closely related field from an accredited university, possess at least 2 years of postdoctoral experience, and have an outstanding record of achievement as exemplified by publications in leading scientific journals.

Successful applicants will be expected to establish and maintain a vigorous, externally funded research program, contribute to the education of undergraduate and graduate students, and participate in the activities of the academic department in which they are appointed.

Applicants should submit a curriculum vitae, a statement of their research interests and future plans, and should arrange for 3 letters of recommendation to be sent to: Dr. John A. Hassell, Chair, Molecular Biology Search Committee, Institute for Molecular Biology and Biotechnology, McMaster University, 1280 Main St. W., Hamilton, Ontario L8S 4K1 Canada. Closing date for applications is November 30, 1998. McMaster University encourages applications from qualified men and women, members of visible minorities, aboriginal peoples, and persons with disability. In accordance with Canadian immigration policies, this advertisement is directed to Canadian citizens and permanent residents of Canada.

CONFERENCE

NIDDK Workshop in Molecular Endocrinology

Co-Activators and Co-Repressors in Gene Expression

December 15-16, 1998 Natcher Conference Center, NIH Bethesda, MD

Co-Chairs: Drs. Richard Goodman, Mitch Lazar, Michael G. Rosenfeld

Targeted presentations of the most recent and state-of-the-art research relevant to the role(s) of co-activators and/or co-repressors in the regulation of gene expression will be presented. The workshop will highlight co-activators and co-repressors -- their mechanism(s) of interaction with receptors or other proteins, and/or with hormone response elements, and regulation of gene transcription through changes in histone acetylation, as well as effects on receptor-chromatin interactions. Platform presentations will be accompanied by a poster session.

Registration will be limited. Further details are available online at http://www.ep.niddk.nih.gov/ DEM/workshop.htm

For registration information, contact TASCON, Inc. at conferencei@tascon.com

For further information, contact: Ronald N. Margolis, Ph.D. Chief, Endocrinology Section NIDDK, NIH Building 45, Room 5AN.12J 45 Center Dr. MSC 6600 Bethesda, Maryland 20892-6600 tel: 301.594.8819 fax: 301.480.3503 e-mail: rm76f@nih.gov

National Institutes of Health, Bethesda, Maryland A Senior Executive Service Vacancy



ASSOCIATE DIRECTOR, BIOLOGY OF AGING RESEARCH PROGRAM NATIONAL INSTITUTE ON AGING

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

THE CHALLENGE: Leadership in the overall scientific administration of an innovative research program in the field of basic biological research with a Fiscal Year 98 budget of \$80 million. Support a broad spectrum of research and training aimed at a better understanding of the biological aspects of aging. Evaluate the Program's needs in relation to the mission of NIA as well as exploring new dimensions in the field of research and training. Expand knowledge in the areas of biology of aging research and guide the NIA's multidisciplinary approach to collaborating and disseminating information to Federal agencies, the public, and at the international level.

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

 Knowledge and ability to lead a scientific program of national and international scope in basic biological research which includes managing a large, multi-disciplinary research program. Experience developing and implementing new or restructured basic biological research programs to meet national and international health and research needs. Experience designing policies for the initiation and execution of multi-disciplinary research and determining the productivity and effectiveness of current research. 2. Ability to provide leadership and broad vision to a large research program with extensive managerial and executive level responsibilities (i.e. training, research resources, strategic planning, budgeting, and human resource management) in a diverse organization. Experience in managing and directing a large scale, multi-disciplinary scientific research program, with responsibility for recruiting, retaining, and rewarding a highly capable, culturally diverse work force; and for developing and executing organizational, budgetary, and human resource plans.

SALARY RANGE: This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from an ES-1 to ES-6 level per annum (currently \$106,412 to \$125,900). Physicians may be eligible for an annual comparability allowance of up to \$20,000. A recruitment bonus of up to 25 percent of base pay may be available to a non-federal candidate, subject to individual approval; a relocation bonus of up to 25 percent of base pay may be available to a permanent Federal employee who must relocate, subject to individual approval.

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

Applications must be postmarked by November 6, 1998 and received by close of business November 13, 1998.

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

For further information contact Ms. O'Connor in the NIA Personnel Office at (301) 496-5460, or e-mail address: OconnorC@exmur.nia.nih. To receive a faxed copy of the vacancy announcement, call 1-800-728-5627, fax ID 1202.

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

National Institute on Aging

Building 31, Room 2C02, 31 Center Drive MSC 2292 Bethesda, Maryland 20892-2292 Attn: Ms. O'Connor, OR E-mail: OconnorC@exmur.nia.nih NIH is an Equal Opportunity Employer





GORDON RESEARCH CONFERENCES

The 1999 Winter and International GRC Programs will appear in the October 2, 1998 Issue of SCIENCE

The preliminary 1999 Summer GRC program will appear in the November 27, 1998 issue of SCIENCE

For further information visit THE GRC WEB SITE

http://www.grc.uri.edu

or request information by Fax at 401-783-7644 VISIT THE FRONTIERS OF SCIENCE **GO TO A GORDON CONFERENCE**

CHIEF

Division of Pediatric Hematology/Oncology DIRECTOR Pediatric Program at the Cancer Institute of New Jersey

The University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical

School (UMDNJ-RWJMS) invites applications and nominations for the position of Chief of the Division of Pediatric Hematology/Oncology in the Department of Pediatrics and Director of the Pediatric Program at the Cancer Institute of New Jersey.

We are seeking candidates who are nationally recognized physician scientists with an established record of research and independent funding in pediatric hematology/ oncology. They must possess strong teaching and clinical skills as well as excellent administrative and leadership abilities. Candidates should have the qualifications for appointment to the rank of Associate Professor or Professor in the tenured track.

Responsibilities will be to develop a nationally recognized clinical and independent research program in pediatric hematology/oncology; to direct the Division of Pediatric Hematology/Oncology; and to provide leadership for the Pediatric Program at the Cancer Institute of New Jersey. Further opportunities will be the participation in the new Children's Hospital which has just had its ground breaking and interaction with the future Child Health Institute, a basic science institute for the investigation of causes of disease at a molecular level with a focus on development.

Nominations and applications should include a brief statement of the candidate's Applications should be addressed to: Patricia Whitley-Williams, M.D., Chair, Search Committee, Department of Pediatrics, MEB Room 326, UMDNJ-Robert Wood Johnson Medical School, One Robert Wood Johnson Place, New Brunswick, NJ



08903. UMDNJ is an equal opportunity and affirmative action employer, m/f/d/v, and a member of the University Health System of New Jersey. Women and minorities are encourage to apply. To learn more about us, please visit our website at: http:/ /www.umdnj.edu



POSTDOCTORAL **POSITIONS** -**SLEEP DISORDERS**

Circadian & Respiratory Physiology We currently have two postdoctoral opportunities in the Sleep Disorders Program, Brigham and Women's Hospital. The successful candidates will study one of the following key areas: circadian rhythms and respiration; or mechanisms of arousal from sleep induced by respira-tory stimuli. Candidates must possess prior experience in the study of human sleep, circadian or respiratory physiology.

Send letter summarizing relevant research experience, curriculum vitae and three letters of reference to: Steven Shea, Ph.D., Associate Director, Sleep Disorders Program, Brigham and Women's Hosptial, 221 Longwood Avenue, Boston, MA 02115, USA, Fax: (617) 975-0809. Email: sshea@GCRC.BWH.harvard.edu.

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NATIONAL CANCER INSTITUTE NATIONAL INSTITUTES OF HEALTH

HEAD OF SPECIALIZED PROGRAMS OF RESEARCH EXCELLENCE (SPORES)

CA-98-1974

Opening Date: September 7, 1998

Closing Date: November 9, 1998

The National Cancer Institute (NCI) seeks a Chief for its **extramural** Organ Systems Branch (OSB). This position oversees and provides leadership for the scientific and fiscal management of the OSB and the planning, development and implementation of Specialized Programs of Research Excellence (SPOREs). SPOREs are teams of extramural basic, clinical and population scientists who focus on a single organ-site cancer and dedicate themselves to translational research that will have an impact on early detection, prevention, diagnosis and treatment of human cancer. The NCI defines translational research as the movement of laboratory discoveries into patient and population research settings or observations in patients and populations back into the research laboratory. This position oversees a wide spectrum of research approaches and is responsible for promoting and facilitating interactions among SPOREs, between SPOREs and the scientific community and between the SPORE Program and other extramural units in the NCI.

SALARY RANGE AND FRINGE BENEFITS: Salary ranges from \$77,798 to \$101,142 per annum. Benefits include health and life insurance, retirement, paid holidays, vacation and sick leave. Salary includes locality pay.

BASIC QUALIFICATIONS: U.S. Citizenship is required. Applicants must meet the basic experience and educational qualification requirements for U.S. government Medical Officer, Biologist, Microbiologist, Geneticist, Health Science Administrator or Chemist positions. In order for the qualifications to be validated and considered, it is **mandatory** that you submit the following with your application: **A**. An undergraduate and graduate transcript or course list which includes grades, and semester hours received per course for all courses; **B**. A current curriculum vitae; and **C**. A description of your proficiency in the following Knowledge, Skills and Abilities (KSAs):

- 1.) General knowledge or familiarity with the basic, clinical and population sciences relating to cancer.
- 2.) Knowledge or familiarity of multidisciplinary research and/or translational research.
- **3.)** Ability to work effectively with scientists and science administrators to promote important scientific opportunities.
- 4.) Ability to lead and manage a research grant program or equivalent.

APPLICATION PROCEDURES: The NCI recruitment bulletin for this position contains complete application procedures and lists all mandatory information which you must submit in your application. To obtain the recruiting bulletin, call **1-800-728-JOBS** (for local calls, 301-594-2953). When prompted, enter the "Fax ID Number" - 1917. You will be prompted for your fax machine number. If you have any questions on qualification requirements or application procedures, or if you wish to obtain a position description or other information, please call (301) 402-2812.

Please submit your resume, SF-171 Application for Federal Employment or OF-612 Optional Application Form by the closing date to:



NATIONAL CANCER INSTITUTE NATIONAL INSTITUTES OF HEALTH HUMAN RESOURCE AND COUNSELING BRANCH 6120 Executive Boulevard, MSC 7211 Executive Plaza South, Suite 550 Rockville, Maryland 20852-7211



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Due to our rapid growth in bioinformatics and genomics, the National Center for Genome Resources, a leading bioinformatics center in Santa Fe, New Mexico, is seeking the following individuals:

DIRECTOR OF COMPUTATIONAL BIOLOGY

Will lead a group of computational biologists in creating, implementing and presenting mathematical models (algorithms) and software systems enabling the NCGR staff and collaborators to make appropriate inferences from biological data. Required: proven managerial experience; Ph.D. in mathematics, engineering, computer science or a related field; 3-5 years experience with integration mathematics, computer science and molecular biology; broad understanding of, and experience in, algorithm development for analysis and visualization of biological data; knowledge of software development process, experience in productively leading a computational biology lab or group; excellent communication and interpersonal skills. Knowledge of genomics/functional genomics is desirable.

Please mark all responses with this code: SC9-18.

To find out more about NCGR, you may access our home page at www.ncgr.org. E-mail to: hr@ncgr.org (in ascii format) Send via fax to: 1-505-995-4432 Send via mail to: NCGR 1800-A Old Pecos Trail Santa Fe, NM 87505 EOE

The Volpe National Transportation Systems Center, the U.S. Department of Transportation's premier think tank that provides essential know-how for national decision-making on transportation issues, is looking for highly knowledgeable professionals in transportation research, innovation, and operations.

Work on the Cutting Edge.

Join a renowned interdisciplinary team of transportation system experts in assessing needs, evaluating alternatives, designing research programs for enabling technologies, facilitating technical innovations in traffic management systems, intelligent vehicles and infrastructure, human/system interface, environmental protection, logistics and information systems, system safety and security-covering every aspect and mode of transportation.

Achieve Recognition.

Be accountable for work on issues and programs of national and international importance. Make presentations in a highly professional, give-and-take environment. Interact with peers across the transportation enterprise. Have additional opportunities to study, teach and publish in the entire range of transportation innovations.

Make a Difference.

Make your professional life count-contribute your knowledge and skills to programs that are truly in the public interest. Do something about public safety and security, national economic growth and trade, human and natural environments.

CURRENT OPENINGS:

U.S. Department of Transportation

Research and Special Programs

Administration Volpe National

Transportation Systems Center ■ Expert in radio communications and radio navigation; experienced electrical engineer or physical scientist preferably prepared at the PhD/DSc level, recognized for significant contributions to Com/Nav technology designs, and/or deployments, and/or system assessments. Salary range \$67K to \$102K.

■ Expert in environment and public health; experienced scientist preferably prepared at the PhD/DSc level in physical science engineering, and/or environmental science, recognized for significant contributions to programs for the identification and/or mitigation of safety and/or environmental impacts of transportation systems. Salary range \$67K to \$102K.

For further information and how to apply visit our Web Site: http://www.volpe.dot.gov or forward resumes to Harry Dondero, Human Resources Management Division, Volpe Center, 55 Broadway, Cambridge, MA 02142 or via e-mail at Dondero@volpe1.dot.gov

The U.S. Government is an Equal Opportunity Employer. U.S. Citizenship is required.

Postdoctoral Fellow

A postdoctoral position is available for an ambitious macromolecular crystallographer in the Biomolecular Structure Group under the supervision of **Dr. Xinhua Ji**. Applications are sought from individuals interested in studying X-ray crystallography of kinases and macromolecular assemblies. Well established research environment, state-of-the-art in-house X-ray equipment, an extensive network of computers, and easy access to the synchrotron light source will facilitate productive research for a qualified candidate. A Ph.D. degree with 0-3 years postdoctoral research experience required. More information about the ABL Basic Research Program may be found at our website: http://nmrweb.ncifcrf. gov/abl/.

The ABL-Basic Research Program at the Frederick Cancer Research and Development Center is located in Frederick, MD (45 miles north of Washington DC) and offers a full complement of benefits, competitive postdoctoral stipends, and an excellent work environment. To apply, please send a curiculum vitae and introductory letter containing a brief description of research experience and three letters of reference to:



Director of Biology

South San Francisco

We are redefining the science of making new medicines through outstanding research, the acquisition of key technologies, and partnerships with some of the world's preeminent pharmaceutical companies.

Leading a team of over 20 scientists, your mission will be to drive the discovery of new small molecule drugs. You'll enjoy excellent resources and our entrepreneurial spirit. If you have a Ph.D. in biochemistry, enzymology, or molecular biology, and significant post-doctoral experience including leading commercial drug discovery research, we invite you to call (888) 520-8394 (24 hrs) for important additional information before submitting a resume. Refer to Position 5219-SM. Equal Opportunity Employer



Children's Hospital Medical <u>Center</u> Cincinnati

Procter Scholars have the opportunity to work with these faculty members:

Bruce Aronow, Ph.D. Functional analysis of adenosine deaminase gene regulatory elements

David Bernstein, M.D. Vaccine development and anti-viral evaluation Jorge Bezerra, M.D. Molecular regulation of liver development and regeneration

John Bissler, M.D. Role of alternative DNA structures in gene regulation and mutagenesis

Thomas Brugge, Ph.D. Fibrinolysis and cancer

Mitchell Cohen, M.D. Regulation of intestine/secretions Melissa Colbert, Ph.D. Developmental biology of cardiac conduction

Robert Colbert, M.D., Ph.D. Antigen processing and presentation in autoimmune arthritis

Stephen Daniels, M.D., Ph.D. Childhood risk factors for the development of adult cardiovascular disease

Alvin Davis III, M.D. Complement proteins, other inflammatory mediators

Jay Degen, Ph.D. Fibrinogen gene targeting and hemostasis Sandra Degen, Ph.D. Molecular genetics of coagulation proteins Michael Fiedler, M.D. Mechanisms of viral induced airway inflammation and injury

David Glass, M.D. Genomics and gene expression in autoimmunity Stephan Glasser, Ph.D., M.S. Surfactant gene regulation Gregory Grabowski, M.D. Molecular pathogenesis and therapy of

human genetic disease
Stuart Handwerger, M.D. Placental and decidual gene expression

Raphael Hirsch, M.D. T-cell function in autoimmunity, gene transfer for autoimmunity Mochiko Ikegami, M.D., Ph.D. Lung injury and development

Alan Jobe, M.D., Ph.D. Pulmonary biology, lung development, surfactant biology

Clinton Joiner, M.D., Ph.D. Sickle cell disease and regulation of cell membrane permeability

Thomas Korfhagen, M.D., Ph.D. Recovery from lung injury James Lessard, Ph.D. Regulation of isoactin expression Jun Ma, Ph.D. Molecular mechanisms of gene regulation Jeffery Molkentin, Ph.D. Cell signaling in hypertrophy

William Nichols, Ph.D. Human genetics, genomics, complex traits Steven Potter, Ph.D. Homeobox genes and mammalian development David Repaske, M.D., Ph.D. Molecular basis of endocrine diseases, signal transduction

Ward Rice, M.D., Ph.D. Lung development and differentiation Jeffrey Robbins, Ph.D. Transgenic and gene targeting and cardiac function

Marc Rothenberg, M.D., Ph.D. Molecular analysis of allergic responses

Andrew Salzman, M.D. Mechanisms of shock Nancy Sawtell, Ph.D. Molecular biology of herpes latency William Scott, Ph.D. Congenital malformations Kenneth Setchell, Ph.D. Mass spectrometry, bile acid and

Eric Smith, M.D. Chondrocyte biology

Lawrence Stanberry, M.D., Ph.D. Herpes virus: biology and nathogenesis

Mark Sussman, Ph.D. Signal transduction pathways Csaba Szabo, M.D., Ph.D. Mechanisms of shock Charles Vorhees, Ph.D. Mechanisms of developmental neurophycity

Barbara Warner, M.D. Lung oxygen injury Timothy Weaver, Ph.D. Regulation of pulmonary surfactant protein Richard Wenstrup, M.D. Cell biology of the extracellular matrix Jeffrey Whitsett, M.D. Lung morphogenesis, gene regulation and

Dan Wiginton, Ph.D. Molecular genetics of adenosine deaminase and T-cell development

Hector Wong, M.D. Heat shock protein biology

Katherine Yutzey, Ph.D. Early cardiac development

Procter Scholar Program for Academic Pediatricians

Children's Hospital Research Foundation, Cincinnati, Ohio

Develop your independent research career at one of the nation's top pediatric medical centers. The Procter Scholar Program at Cincinnati Children's prepares young physicians for biomedical or clinical investigative careers in pediatrics.

Designed to facilitate the career development of pediatricians, the program is aimed at highly skilled MD or PhD/MD graduates with a strong career commitment to academic pediatrics. The program provides both financial support and appropriate scientific mentorship in preparation for independent investigatorship.

Successful Candidates

Successful Procter Scholar candidates will hold a faculty-level position at Children's Hospital Medical Center. If a candidate has completed only the clinical stage of fellowship, we offer a research component to the fellowship for one or two years before he or she becomes a Procter Scholar. For candidates who start at the fellowship level, the program is consistent with a "Special Alternative Pathway" established by the American Board of Pediatrics.

Join a National Leader

Cincinnati Children's is internationally recognized as one of the nation's top pediatric care and research institutions. Our 300-bed hospital ranks first among pediatric hospitals in the number of emergency department visits, outpatient visits and surgical procedures. Our medical and research staff comprise the Department of Pediatrics at the University of Cincinnati College of Medicine, and we train more than 300 residents and post-doctoral physicians and researchers each year.

Children's Hospital Research Foundation ranks third nationally in NIH funding to full-service children's hospitals. In 1998, sponsored program awards exceeded \$37 million, the fifth year in a row for double-digit increases in external funding. Founded in 1931, the Research Foundation is growing from 400,000 to nearly 525,000 square feet to make room for new laboratories and expanded programs.

We Invite You to Apply

Application deadline: November 1, 1998, for awards beginning July 1, 1999

Candidates must be U.S. citizens or have a permanent visa. Candidates may be invited to Cincinnati for interviews with relevant laboratory directors and the selection committee.

Documents needed to apply:

- 1. A curriculum vitae to include undergraduate college, field of concentration, medical school, details of postgraduate medical training, medical licensure, board certification, research experience, honors and awards, and publications.
- 2. Two letters of recommendation from faculty familiar with your academic and clinical performance, sent directly by the faculty members to Valeria O'Haver at the address below. One letter must be from either the chairman of the pediatrics department or the director of the relevant subspecialty program where you are in training.
- A synopsis, no longer than two pages, describing your career goals and type of training desired.
- 4. A listing of faculty at Children's Hospital Medical Center who appear to offer the kinds of training you desire. Visit our web site at www.cincinnatichildrens.org to learn more about our faculty and their areas of research.

Visit our web site at www.cincinnatichildrens.org to learn more about our capabilities.

Address all inquiries to: David N. Glass, M.D. Telephone: 513-636-8854 Email: glasd0@chmcc.org

Applications and supporting documents should be mailed to:

Valeria O'Haver Telephone: 513-636-8854 Email: o'havO@chmcc.org William Cooper Procter Research Awards Children's Hospital Research Foundation Division of Rheumatology 3333 Burnet Avenue, Pav. 2-129 Cincinnati, Ohio 45229-3039 Telephone: (513) 636-8854

An Equal Opportunity/Affirmative Action Employer

THE UNIVERSITY OF CALIFORNIA, SAN DIEGO DEPARTMENT OF BIOLOGY

The Department of Biology at UCSD has a large faculty spanning many areas of biological science and one of the largest and most diverse graduate programs in the country. We invite applications for the following:

Neurobiology, Neuroethology

A faculty position with strong preference for the Assistant Professorial (tenuretrack) level in one of many areas of neurobiology, including genetic, molecular, cellular, developmental, systems, and behavioral neurobiology. Candidates must have a Ph.D. or equivalent degree. Exceptional candidates in the area of behavioral neuroethology may be considered for a second position, the endowed Walter Heiligenberg Chair. Applicants with all levels of experience from Assistant Professor (tenure-track) to Full Professor (tenured) could be considered for the Heiligenberg Chair. The positions will involve the development of rigorous research programs supported by extramural funds and the teaching of undergraduate and graduate students. Salary will be commensurate with level of appointment and based on the UC salary scale.

Applications received by November 1, 1998, will be assured of consideration. Send a letter of application including a résumé, a complete list of publications, a brief description of research interests, and the names, addresses, e-mail addresses, phone and fax numbers of at least three references to: **Neurobiology Search Committee, Department of Biology 0346, University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093-0346.**

Community Ecology, Behavioral Ecology, Neuroethology

A faculty position with strong preference for the Assistant Professorial (tenuretrack) level in the areas of either community ecology or behavioral ecology. Successful applicants are expected to develop vigorous research programs and interact strongly with existing faculty in the areas of ecology, behavior, evolution, and conservation. We seek applicants in any area of behavioral ecology. Community ecology is broadly defined as well and includes aquatic or terrestrial ecosystems, plant or animal multispecies interactions, landscape ecology, host/ parasite interactions, and physiological ecology. Exceptional candidates in the area of behavioral neuroethology may be considered for a second position, the endowed Walter Heiligenberg Chair. Applicants with all levels of experience from Assistant Professor (tenure-track) to Full Professor (tenured) could be considered for the Heiligenberg Chair. Salary will be commensurate with level of appointment and based on the UC salary scale.

File review will begin November 1, 1998, and continue until the position is filled. Applicants should send curriculum vitae, a statement of professional goals and research interests, and names of three references and their addresses, e-mail addresses, phone, and fax numbers to: **Ecology Search Committee, Department of Biology 0346, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0346.**

Biochemistry/Molecular Biology

A faculty position in Biochemistry/Molecular Biology with strong preference for the Assistant Professorial (tenure-track) level. Exceptional candidates pursuing innovative biochemical approaches to problems in molecular biology are encouraged to apply. Areas of interest include, but are not limited to, DNA replication, RNA splicing, DNA repair, signal transduction, and gene expression.

Salary will be commensurate with level of appointment and based on the UC salary scale. The successful candidate is expected to develop a vigorous research program, and participate in the undergraduate and graduate teaching curriculum. A Ph.D. degree and several years of productive postdoctoral research are required.

Please submit by November 1, 1998, a curriculum vitae, a statement of professional goals and research interests, names of three references and their addresses, e-mail addresses, phone and fax numbers to **Biochemistry Search Committee, Department of Biology 0346, University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093-0346.**

All positions are contingent on funding becoming available. UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

FACULTY POSITION IN ECOLOGY-BIODIVERSITY UNIVERSITY AT ALBANY STATE UNIVERSITY OF NEW YORK

The Department of Biological Sciences is recruiting a tenure-track faculty member at the level of advanced Assistant or Associate Professor. Applicants should have backgrounds in fields that complement the department's current strengths in conservation biology, behavioral and community ecology, and molecular evolution. The successful candidate is expected to have demonstrated record of teaching at the undergraduate and graduate levels, of training M.S. and Ph.D. students in field and laboratory research, and of having an externally funded research program. We seek a person with a strong commitment to biological conservation. The selected candidate will have the opportunity to play a leading role in the continuing development of our new interdisciplinary Master's program in BioDiversity, Conservation and Policy, in conjunction with the Rockefeller College of Public Policy and Administration. Research interests in the Department are broad and include Ecology and Animal Behavior; Molecular, Cell, and Developmental Biology; and Neurobiology. See our website for details (http://www.albany.edu/biology/index.html). Position begins fall, 1999. The University at Albany, located in the capital of New York State, is one of four Research Centers in the State University of New York system. Send curriculum vitae, statements of teaching and research interests, and arrange to have three (3) letters of reference sent to: Chair of Biodiversity Search Committee, University at Albany, Department of Biological Sciences, 1400 Washington Avenue, Albany, NY 12222. 518-442-4388. Deadline for applications is November 1. SUNY at Albany is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL RESEARCH

A position is available to study signal transduction pathways involved in the activation of phospholipases A2 and D. Experience in molecular biology and immunofluorescence microscopy desirable.

Please send c.v. and two reference letters to:

National Jewish Medical and Research Center 1400 Jackson St., G110 Denver, CO 80206 Attn: Christina C. Leslie, Ph.D. Department of Pediatrics



The National Jewish Medical and Research Center is an Affirmative Action/Equal Opportunity employer

Georgia Southern University Assistant Professor – Organic Chemistry

The Department of Chemistry at Georgia Southern University invites applications for two tenure-track faculty positions in Organic Chemistry to begin August 1, 1999. All areas of experimental organic chemistry will be considered, but applications from individuals whose teaching and research interests are in the areas of synthesis, bio-organic, and polymer chemistry are especially encouraged. Applicants must have an earned Ph.D. in Chemistry by time of appointment, command of written and spoken English, demonstrated teaching and research abilities, and a commitment to teaching at the undergraduate level. Successful candidates will teach sophomore organic chemistry, elective courses in their specialty, and lower-level general chemistry, and will be expected to develop an effective research program in collaboration with undergraduate students. Salaries dependent upon qualifications. For more information, see Departmental Web Page: http://www2.gasou.edu/Chemdept/

Applicants should send a current résumé, unofficial copies of undergraduate and graduate transcripts, a statement of teaching philosophy, a description of proposed research, and have three letters of reference sent to Dr. Bill Ponder, Chair, Department of Chemistry, P.O. Box 8064, Georgia Southern University, Statesboro, GA 30460-8064. Postmark deadline for completed applications is October 30, 1998. The names of applicants and nominees, résumés, and other general nonevaluative information are subject to public inspection under the Georgia Open Records Act. GSU, a regional university in the University System of Georgia, is an EO/AA Institution. Persons who need accommodations in the application process under ADA should contact the department chair.

POSTDOCTORAL POSITION

A position in a dynamic lab with high scientific standards is immediately available to characterize novel genes involved in signaling pathways of tumor necrosis factor family members. Demonstrated scientific excellence rather than prior specific research fields is important.

Please send c.v., reprints and two recommendation letters to:

National Jewish Medical and Research Center 1400 Jackson St., G110 Denver, CO 80206 Attn: Dr. Hong-Bing Shu, Division of Basic Immunology



The National Jewish Medical and Research Center is an Affirmative Action/Equal Opportunity employer The Search For Cures Begins With A Search For The Best.

Pfizer is involved in some of the most critical research in the world today. As a Fortune 100 company, we have established a product pipeline that is unparalleled, and an intellectual, collaborative environment that inspires achievement. Join us and become a part of the cure.

Located on the shores of historic Groton, CT, Pfizer offers a high quality of life in close proximity to New York City, Providence and Boston. In addition to a fast-paced, yet collegial environment, we offer very competitive salaries and excellent benefits including relocation assistance. For confidential consideration, please forward resume to: Employee Resources, Pfizer Inc, Job Code #_ , Central **Research Division, Eastern Point** Road, Groton, CT 06340. For more information about Pfizer, see us on the Internet at: http://www.pfizer.com. We are an equal opportunity employer M/F/D/V.

BS/MS Scientist Obesity Biology

Obesity Biology Team seeks a scientist to contribute to in vivo and in vitro studies for the evaluation of pharmacologic agents. BS in Biology, Biochemistry, Pharmacology, or related discipline and experience with in vivo models and in vitro biochemical assays is required. MS with neuroscience experience and/or experience with food intake studies or cell culture is preferred. Pharmaceutical research experience in a drug discovery laboratory desirable. **Job Code: 2812**

Research Scientists

Genetic Technologies

We are currently seeking exceptional candidates to join our Genetic Technologies Group as Research Scientists specializing in the following areas:

Target Identification

Utilize DNA microarray, proteomics, and bioinformatics technology to identify and characterize novel drug targets. A broad based knowledge of molecular and cell biology is required. Recent experience with microarray expression profiling and genome database analysis using current bioinformatic tools is also desirable. **Job Code: 2813**

Target Validation

Establish in vitro cell-based assays for gene function and screening; identify and adapt molecular technologies for gene function analysis. The successful candidate will have broad tissue culture experience and will utilize novel molecular approaches for cell transfection, expression control, and mutagenesis. **Job Code: 2814**

Transgenics

Use transgenic and ES cell derived mice for target validation, gene function, and preclinical model development. The successful candidate will have experience in all aspects of murine in vivo genetic manipulation including conditional approaches. **Job Code: 2815**

Bioinformatics

Develop and apply computational methods for the analysis of genome data in the context of drug discovery. Create databases and tools for gene family analysis, gene chip design, sequence motif detection, and expression pattern discrimination. Experience with current bioinformatics methods and programming skills in SQL and Perl in a Web-based environment are essential. **Job Code: 2816**

All Research Scientist positions require a Ph.D. in Molecular Biology, Cell Biology, Biochemistry, or Genetics with at least two years of postdoctoral research experience. We seek individuals with excellent communication skills to interact with internal therapeutic area project teams and external biotechnology partners. Industry experience including supervisory responsibility, and facility with information technology tools are desirable.



We're part of the cure.

nature Structural biology

seeks a TALENTED MOLECULAR BIOLOGIST

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

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

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

The Editor Nature Structural Biology 345 Park Avenue South, 10th Floor New York, NY 10010-1707 Fax: 212 679 0735 e-mail: nsb@natureny.com

The closing date for applications is the 30th of September.



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

National Sea Grant Research Program Officer

The National Sea Grant College Program is a partnership of academia, government, and industry focusing on coastal and marine resources. The Department of Commerce, NOAA, National Sea Grant Office, has extended the closing date for the following position:

National Sea Grant Research Program Officer. Serves as the coordinator within the National Sea Grant Office for coastal and marine research activities related to water quality issues, including program development and evaluation; maintains an overview of current Sea Grant environmental research and outreach activities, identifies research needs related to sustainable development of coastal resources, and develops cooperative activities with appropriate government programs, nongovernmental organizations, and industry partners; serves as program officer for state Sea Grant programs, including oversight and evaluation of university-based research and outreach activities.

Advanced degree in technical or scientific field appropriate to addressing coastal, Great Lakes, and marine water quality issues is highly desirable; experience working with academic institutions is highly desirable. Experience in program evaluation and federal grant negotiation is desirable.

Salary: \$55,969 to \$89,978 (dependent on experience and qualifications). Location: Silver Spring, Maryland. Application address: NOAA/HRMO/OFA45, NESFO HRD, VA# H/OAR/980011.CM2, 1315 East-West Highway, Silver Spring, MD 20910-3285.

ALL APPLICATIONS MUST BE POSTMARKED BY OCTOBER 06, 1998. The complete Vacancy Announcement is available online at **www.usajobs.opm.gov/wfjic/jobs/BE9323.htm**. Since this position is a readvertisement to extend the closing date, those applicants who previously applied for Vacancy announcement H/OAR/ 980011. CMM need not reapply; their applications will automatically be considered for this position.

The Department of Commerce (DOC) does not condone or tolerate discrimination based on race, color, religion, sex, national origin, age, physical or mental disability, or sexual orientation.

Infigen, Inc., an affiliate of ABS Global, Inc., is a farm animal biotechnology company specializing in the development and commercialization of genetic and reproductive technologies for use in human pharmaceutical and farm animal production fields.

TRANSGENICS SCIENTIST

The selected individual will join a team of highly motivated individuals working to produce transgenic farm animals that are engineered to produce pharmaceutical proteins and specialized agricultural products. Preferred candidates will have experience with gene targeting techniques and production of knockout animals; knowledge of ES cell technology including DNA construct design and synthesis, transfection and selection of positive/negative cells; as well as general gene cloning, sequencing, and use of RT-PCR. Experience with differential display analysis helpful. Highly motivated, flexible individuals who work well with others required. Ph.D. with relevant experience or highly qualified M.S. applicants considered.

RESEARCH ASSISTANTS

We are seeking two individuals with mammalian cell culture, embryo manipulation (nuclear transfer) and cell transfection/selection experience to assist with production of transgenic cell lines for cloning purposes. Qualified candidates will possess at least a B.S. in Biochemistry, Molecular Genetics, or related field and 2–3 years of relevant experience in a highly productive research setting. Additionally, we are seeking one individual with experience using automated high-throughput genotyping and DNA sequencing equipment in addition to mammalian cell culturing. Qualified candidates will possess a B.S. or M.S. degree in a biological science and have considerable research experience in a related field.

Cutting-edge research opportunities in a fast-paced, team-driven environment along with competitive compensation packages are offered. Please submit a résumé or curriculum vitae with letter of interest and salary requirements to:

Infigen, Inc. ATTN: Human Resources 6908 River Road DeForest, WI 53532 Fax: 608/846-6442 www.absglobal.com

Equal Opportunity Employer M/F/D/V





DATABASE DEVELOPER San Diego Super Computer Center

We are seeking a Database Developer for a large scale bioinformatics initiative involving the Macromolecular Structure Database (MSD). The MSD is an NSF-funded initiative to provide a worldwide community of biologists with access to macromolecular structure data derived experimentally from X-ray crystall-ography and NMR.

Requires experience in developing biological databases, Sybase and objectoriented databases. Programming skills in C++, Perl, and Java are essential. Theoretical background as demonstrated by an MS or Ph.D. in Biology or related field with computational methods and interest in bioinformatics also necessary. Experience with CORBA highly desirable.

Hiring Salary Range: \$45,200-\$62,450. Please send CV and three references, referencing Job # C2685-S, to: sendcv@ucsd.edu, Attn: Professor Philip E. Bourne; or mail to: UCSD Human Resources, 9500 Gilman Drive,

La Jolla CA 92093-0967. EOE/AA Web Site:



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Glaxo Wellcome Inc., one of the world's largest pharmaceutical companies, is a company of people working together for a healthier world. Our breakthrough discoveries are helping people with HIV/AIDS, cancer, heart disease, asthma, migraines, epilepsy and many other diseases. Come share the challenge of leadership as we develop breakthrough medicines for everyday living. We currently have the following openings at our U.S. Corporate Headquarters located in Research Triangle Park, N.C.

ASSOCIATE SCIENTIST/SCIENTIST Pharmacology

Working with the **Department of Metabolic Diseases**, the successful candidate will be responsible for conducting in vitro and in vivo studies and collaborating with a variety of research scientists in a team approach to the discovery and selection of new drug candidates and targets. This requires basic skills and continued development of applied knowledge in the areas of general metabolism, pharmacology, cell biology and molecular biology. Oral and written communication of results (e.g. presentations, reports & publications) is required.

This position requires a BS degree in a biological sciences area and at least 2 years experience working with molecular biology techniques, cell culture, and rodents or an MS degree with similar training and experience. Strong background in a variety of cellular and molecular biological techniques and experience with in vivo techniques are desired. Previous experience in metabolism and drug screening and an understanding of the drug discovery and development process is preferred. **Refer to Job #ASC5867-1 on all resumes.**

POSTDOCTORAL FELLOW Pharmacology

Working within the **Department of Metabolic Diseases**, the successful candidate will be involved in developing state-of-the-art imaging technology and instrumentation to study metabolic processes both in vitro and in vivo (see a recent publication by Paulik et al., 1998 (Pharm Res 15:.944-949).

Qualifications include a Ph.D. in Bioengineering, Biochemistry, Cell Biology or a related discipline. An understanding of computer systems, excellent analytical skills and an interest in cell biology/metabolism are required. Candidate must be self-motivated and innovative with excellent oral/written communication skills and the ability to work effectively in a cooperative team environment. **Refer to Job #ASC5871-1 on all resumes.**

ASSOCIATE SCIENTIST/RESEARCH SCIENTIST Biological Sciences

This key individual will prepare target proteins and protein reagents for uses throughout Research. The candidate will use state-of-the-art techniques in molecular biology, biological expression systems and protein purification and assist in the characterization of the reagents for HTS and structural studies.

This position requires a BS with at least 2 years of relevant experience and/or an MS with relevant training; experience with expression systems, expression vectors and molecular/cellular biology training; formal training in biochemistry or related field; experience in protein purification and functional characterization; significant knowledge of protein expression and protein biochemistry and state-of-the-art computer skills. **Refer to Job # ASC5691-1 on all resumes.**

Our location is just another great reason for joining Glaxo Wellcome. We are located in Research Triangle Park, NC, the world's largest planned research center, and are within easy reach of three major universities and offer outstanding cultural activities and a superb quality of life. You'll also benefit from a competitive salary and a comprehensive benefits package. For consideration, send your resume, which must include position title/job# and salary history, to: **Human Resources Department, Glaxo Wellcome Inc., 5 Moore Drive, Bldg. 5, Room 2520, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) To review other openings, call our Job Line or visit our Website. An Equal Opportunity Employer M/F/D/V



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Website: www.glaxowellcome.com Job Line: (919) 483-2565

Director, Grain Research Laboratory

Canadian Grain Commission

Winnipeg, Manitoba, Canada

As the Chief Scientific Advisor on grain quality to the Canadian Grain Commission, serving the Canadian grain industry, you will be responsible for the efficient and effective planning and conduct of basic and applied research and related scientific activities in support of Canada's grain quality and safety assurance system, marketing, and market development of Canadian grain products. You will act as international liaison on methodology and standards for grain quality and participate in and coordinate travel to market countries.

You must hold an acceptable doctoral degree from a recognized university with a specialty in a relevant scientific area. You have significant experience in initiating, conducting, evaluating, and directing scientific research related to the grain industry (domestic and international); have liaised with private, government, university, and international research institutes; have lead multi-disciplinary research teams and programmes; and have managed human and financial resources. Secret Security Clearance will be required.

Please forward a complete résumé, demonstrating that you meet all of the above mentioned requirements, by October 9, 1998, quoting reference number CGC13454(G35) to Economic Sector, PSC Executive Programmes, L'Esplanade Laurier, West Tower, 21st Floor, B2140, 300 Laurier Ave. West, Ottawa, Ontario K1A 0M7. Fax: (613) 992-8918. For a selection profile and job description, please contact us at (613) 996-4946. To apply on-line, visit our Internet site at http://www.psc-cfp.gc.ca/jobs.htm

Preference for appointment will be given to Canadian citizens. We thank all those who apply; however, only those selected for further consideration will be contacted. We are committed to employment equity.

Vous pouvez obtenir ces renseignements en français.



Public Service Commission of Canada Commission de la fonction publique du Canada

Canadä



U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) RESEARCH LEADER/ BIOLOGIST National Center for Cool and Cold Water Aquaculture

USDA Agricultural Research Service is seeking a Supervisory Research Biologist with a background in aquaculture to be Research Leader of the National Center for Cool and Cold Water Aquaculture in Leetown. West Virginia. This unique National facility is co-located with the Leetown Science Center of the U.S. Geological Survey. The successful candidate will be responsible for conducting and administering basic and applied research that meets the needs of the Center's Mission to support and enhance the Nation's cool and cold water aquaculture production. The incumbent will also serve as Research Program Representative during the design and construction of the Center with a program of applied genetics and breeding, fish health, physiology and nutrition culture and production management, aquaculture engineering, and product quality of cool and cold water species including, but not limited to, rainbow trout, Arctic Char, salmon, and hybrid striped bass. Experience in leading a diverse program related to aquaculture production, protection, and breeding is preferred. A Ph.D. is desirable and research qualifications are determinant in the salary range of GS-14: \$66,138 to \$85,928; GS-15: \$77,798 to \$90,767.

Candidate must be a U.S. citizen. For additional information on the position contact Wilda Martinez at 215-233-6593 or email at wmartinez@ars.usda.gov. Applicants must review the vacancy announcement prior to application submittal. See Website: www.ars.usda.gov/afm/ hrd/resjobs. For application information/instructions contact Maryanne Cage at 304-725-3451, Extension 332.

Applications must be postmarked by October 15, 1998. USDA/ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.



NATIONAL PROGRAM LEADER for Biological Control, USDA, ARS, National Program Staff, Crop Production, Product Value, and Safety, Beltsville, Maryland, is seeking an Entomologist/ Ecologist. Salary commensurate with experience (\$77,798 – \$101,142). Appointment is permanent full-time position *and requires U.S. citizenship.*

Incumbent serves as a National Program Leader responsible for leading and coordinating ARS' programs relating to biological control of arthropod pests, and is co-leader for biological control of weeds, which includes program planning and implementation activities for the assigned area.

Candidates must possess 1) a Bachelor's or higher degree in entomology, ecology, or a related discipline and 2) specialized experience equivalent to the next to the next lower grade level and directly related to the position. (For specific qualifications see vacancy announcement.) For program information, contact Judy St. John at (301)504-6252, fax: (301)504-6719, or e-mail: jsj@ars.usda.gov. For application package with complete qualifications requirements and instructions, contact the Human Resources Division (301)504-1484 and request vacancy announcement number ARS-S8B-8297. Applications must be postmarked by November 9, 1998.

USDA/ARS IS AN EQUAL OPPORTUNITY EMPLOYER www.ars.usda.gov/afm/hrd/resjobs Discover the extraordinary benefits of living in one of the nations' most vibrant metro areas. See for yourself why the Triangle was ranked the 5th best city in the country by Fortune magazine for working and raising a family. And why Novartis is number one in the world for careers in the life sciences.

UNOVARTIS

The world is hungry for what you bring to the table. Strong leadership skills. Ingenious perspective on gene discovery. Proven track record.

Novartis Agribusiness Biotechnology Research, Inc., is seeking a highly accomplished professional to lead a multi-disciplinary team of scientists. Your team will discover genes that control the biosynthesis of novel principles active against fungal and insect pests. The focus of your efforts will include the development of high throughput screening methods, as well as the creation of DNA libraries from a wide range of microbial organisms with known activity as well as from "unculturable" organisms. Other challenges will involve the characterization of active genes and metabolites. As the group leader, you will manage budgets and allocate resources to a wide range of tasks in different disciplines within the team, and initiate and manage collaborations with key third parties.

Group Leader Microbial Gene Discovery Position #9854

You must have a PhD and a background of significant accomplishments, including 5+ years' experience leading a successful research group, and significant publications or patent applications. A knowledge of environmental microbiology, prokaryotic expression systems, isolation and characterization of proteins and small molecules and high throughput screening is required. Effective leadership, management, supervisory, communication and interpersonal skills in order to interact with related groups in different research functions and different sites are also essential.

You will be joining a dynamic research program which is second to none with state-of-the-art biotechnology laboratories at Research Triangle Park, NC. Our plans for this facility include a \$20 million expansion program which will encompass a new building, additional greenhouses, and the extension and major renovation of existing laboratories to accommodate new scientists to be hired during the next two years.

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates should forward a resume and cover letter to: novartisbiotech@recruitmentsolutions.com Indicate the position #9854-SM-BRI in the subject area. To ensure that your information is uploaded into our HR System, please do not send your resume and cover letter as attachments. We are an Equal Opportunity Employer M/F/D/V.

RESEARCH ASSOCIATE III

Seeking a highly motivated candidate to conduct technical studies in human cellular immunology. Individual must be willing to work necessary hours to maintain cell lines and, in some cases, conduct experiments.

The individual must have previous experience of greater than 5 years as a Senior Research Associate, with both academic and industrial experience. Requires demonstrated expertise in each of the following: Cloning of CD8 cytotoxic lymphocytes (CTL) from humans specific for viruses, including CMV or HIV; maintaining CTL clones and cultures for extended periods; performing CTL epitope analysis, using synthetic peptides in chromium release assays; making recombinant vaccinia viruses using plasmid DNA; maintaining, growing, and expanding vaccinia virus and titering of final product; using cytomegalovirus strains in CTL analysis; expanding cytomegalovirus on fibroblast monolayers; maintaining EBV LCL and cataloging clinical cohort of cell lines; performing translent transfection analysis using recombinant DNA in COS cells; measuring TNF-alpha using the WEHI assay; measuring the cytotoxicity of TNF-alpha using a colorimetric assay and an ELISA plate reader; using the fluorescence microscope and the flow cytometer, including FACS scan or FACSCalibur; ordering tissue culture supplies, liquid nitrogen and CO2 tanks; interfacing with vendors; and maintaining tissue culture incubators. Individual must have prior experience in working with cells infected with viruses such as HIV, CMV, EBV, or vaccinia. Individual must also be willing to work with herpes and pox viruses and radioactivity, including chromium 51Cr, 3H, 35S, and 32P. Molecular Biology, including cloning of plasmids and DNA fragment isolation, is preferred.

Send curriculum vitae and contact information of three references to: Scott Sparks, Sr. Recruiter, City of Hope National Medical Center, 1500 E. Duarte Rd., Duarte, CA 91010-3000. FAX (626) 301-8182. E-mail: COHAPPLY@smtplink.org. EOE.



U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Microbiologist/Research Food Technologist (Lead Scientist) Eastern Regional Research Center

The Eastern Regional Research Center (ERRC), Agricultural Research Service (ARS) has a challenging position for a permanent full-time Microbiologist/Research Food Technologist. This individual will serve as a Lead Scientist in the prestigious Microbial Food Safety Research Unit. ERRC is located on an attractive 27-acre campus just outside Philadelphia, in Wyndmoor, Montgomery County, Pennsylvania. Employees enjoy a flexible work schedule and have access to public transportation. Research facilities include sophisticated and well-equipped labs, pilot plans, computer unit, and library. The scientist will be responsible for leading a research program that will develop models that determine the survival of food-borne pathogens, with particular emphasis on Salmonella, Staphyloccus, Listeria, and Escherichia coli in fermented, uncooked meat products. Candidates must have knowledge of food microbiology, microbial physiology, and ecology; food-borne microbial pathogens, and food processing engineering; skills in mathematical and statistical concepts to build predictive formulas for computer-based models that determine microbial behavior in foods; and skill in developing, coordinating, and leading research programs and supervising and providing leadership to a multidisciplinary staff. U.S. citizenship is required. Salary commensurate with experience, GS-13: \$56,178 to \$73,029; GS-14: \$66,385 to \$86,299; GS-15: \$78,088 to \$101,519 per year. For more information on the position call Dr. John P. Cherry at 215-233-6595 or E-mail at jcherry@ars.usda.gov. Visit the ARS Vacancy website: www.ars.usda.gov/afm/hrd/resjobs. For application package call Mary Ann Byrne at 215-233-6571. Applications must be marked ARS-X8N-8245, be complete, and postmarked by October 26, 1998. USDA/ARS is an Equal Opportunity Employer.

Women and minorities are encouraged to apply.

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

RESEARCH MANAGER, MOLECULAR BIOLOGY (2)

The successful candidates will join our molecular biology team to assist in the design and construction of gene expression vectors for new products. They will also participate in an ongoing effort to maximize gene expression in plants. These positions require a Ph.D. or equivalent in biochemistry, or a related field with relevant postdoctoral experience, and require familiarity with nucleic acid and protein techniques. Preference will be given to candidates who have experience with immunology or animal science.

RESEARCH ASSOCIATE, MOLECULAR BIOLOGY

The successful candidate will join our molecular biology team to assist in the construction of gene expression vectors and to participate in an ongoing effort to maximize gene expression in plants. This position requires a Bachelor's degree or equivalent in biochemistry or a related field with a minimum of two years of experience with nucleic acid and protein techniques.

RESEARCH MANAGER, PLANT CELL BIOLOGY

The successful candidate will join our plant cell biology team and will be responsible for conducting and managing maize transformation projects for product development. This position requires high throughput and good organizational skills. This position requires an M.S. degree or equivalent plus five years of experience or a Ph.D degree or equivalent plus two years of experience in crop transformation, preferably maize. Experience with *Agrobacterium* is desirable.

RESEARCH MANAGER, BIOCHEMISTRY

The successful candidate will join our biochemistry team and will be responsible for the hands-on analysis and development of assays for specific proteins, as well as purification and characterization of these proteins. This position requires a Ph.D. or equivalent in biochemistry with experience in protein purification and characterization. Preference will be given to candidates with additional experience in robotics/automation.

RESEARCH ASSOCIATE, BIOCHEMISTRY (2)

The successful candidate will join our biochemistry team and will be responsible for assisting in the development and implementation of immunoassays and enzymatic assays. A second position will be responsible for the purification and characterization of recombinant proteins expressed in a variety of systems. These positions require a Bachelor's degree or equivalent in biochemistry, microbiology, or a related field with two to three years of experience.

Please mail or fax your letter clearly indicating the position of interest and include a complete résumé and the names of three professional references to:

Human Resources Department Liz Eickenhorst ProdiGene 1500 Research Parkway, Suite 220 College Station, TX 77845 Fax: (409) 862-8538

RESEARCH SCIENTIST

Vysis is a leading Genomic Disease Management company that develops, commercializes and markets clinical products that provide information critical to the evaluation and management of cancer, prenatal disorders and other genetic diseases. We're seeking a selfmotivated individual with good problem-solving and communication skills to join a team of scientists in our Research and Development division.

This position requires a BS or MS (preferred) in biology, genetics or related field, with a minimum of 5 years post-MS or 8 years post-BS experience. Must be experienced in nucleic acid hybridization, molecular biology and human genetics, and in situ hybridization. Must be able to plan, conduct and evaluate experiments with minimal supervision. Will work as a team member developing DNA tests for human genetic diseases and cancer, performing DNA close isolations and characterizations, and optimizing DNA probe performance. Must have ability to work on multiple projects and maintain complete and accurate notebooks and other records.

In addition to a key management role with a rapidly growing company, you'll enjoy an excellent salary and benefits package. Please submit resume including salary history to: Human Resources, **VYSIS, INC.**, 3100 Woodcreek Drive, Downers Grove, IL 60515. Fax: (630) 271-7008.www.vysis.com EOE M/F/H/V

Genome Systems, Inc., a wholly owned subsidiary of Incyte Pharmaceuticals, Inc., is a leader in providing genetic engineering products, reagents and services for the general scientific community.

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Genome Systems, Inc. has an immediate opening for a highly motivated, detail oriented Group Leader/Director for our Sequencing Operations. This position will be responsible for directing the Sequencing Operations, Clone Archiving/Distribution, and the Clone Transfer Group of a specialized clone/reagent verification business and large scale sequencing processes that support both internal and external customers. This position is also responsible for budget scheduling and management. Must possess excellent analytical, organizational and leadership skills. Position requires Ph.D. or MS in biological sciences, demonstrated group management ability, 3 + 5 years sequencing experience and 3 - 5 years of laboratory experience.

If you recognize these qualities in yourself, we want to hear from you. We offer competitive salaries, an outstanding benefits package and significant opportunities for professional growth. Mail/fax your resume with cover letter specifying position and salary requirements to Human Resources Dept., Genome Systems, Inc., Reference: Job #SEQDIR, 4633 World Parkway Circle, St. Louis, MO 63134, FAX (314) 506-6421. No phone calls please. Visit our website at: www.genomesystems.com An Equal Opportunity Employer, M/F/V/D

Symposium



Research at the Pharmacology/Chemistry Interface

The Pittsburgh **Drug Discovery Symposium** October 22, 1998 8am-5pm **Biomedical Science Tower S100** University of Pittsburgh **Cancer** Institute M. Egorin M. Gallop K. C. Nicolaou D. L. Taylor D. Von Hoff P. Workman All are welcomed. For free registration and information contact: Professor John S. Lazo. Pharmacology 412-648-9319 **Professor Craig Wilcox**, Chemistry

412-624-8270



Postdoctoral Fellowship at NIH HIV Research

A postdoctoral position is available for molecular studies on replication of HIV and other mammalian retroviruses. Research projects include functional analysis of reverse transcriptase; the role of host or other viral proteins, such as the nucleocapsid protein, in reverse transcription; and investigation of virus assembly. Studies are performed with model systems and HIV-infected cells. Applicants should have a strong background in molecular biology and either protein biochemistry or virology and less than five years of postdoctoral experience. Please send a curriculum vitae, bibliography, and the names and addresses of three references to:

Dr. Judith G. Levin, Chief, Section on Viral Gene Regulation, Laboratory of Molecular Genetics, NICHD, Building 6B, Room 216, NIH, Bethesda, MD 20892. Fax: (301) 496-0243. E-mail: judith_levin@nih.gov

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Vice President for Research and Dean of the Graduate School



Applications and nominations are invited for the position of vice president for research and dean of the graduate school for the University of Florida. The vice president for research reports to the president of the university and is the director of the university's Office of Research, Technology, and Graduate Education (ORTGE). The vice president for research, as the director of ORTGE, is responsible for facilitating research and transfer of technology at the University of Florida. The vice president carries out the responsibilities of the Division of Sponsored Research. The vice president for research is also the president of the University of Florida Research Foundation, Inc. (UFRF), a nonprofit direct support organization of the university to support and assist technology transfer at the university. The vice president for research and dean of the graduate school is also the chief administrative officer of the Graduate School, and in that capacity reports to the provost and works closely with college deans to promote and support graduate education at the University of Florida. The Graduate School coordinates more than 200 graduate programs throughout the university's colleges and schools at the master's and doctoral levels. Emphasis on research is indicated by more than \$190 Million of sponsored research expenditures in 1996. There are more than 100 interdisciplinary research and teaching centers at the university. Desired qualifications include the doctoral degree in an appropriate area of specialization. The Vice President should have the qualifications necessary to hold a tenured position with the academic rank of professor in an appropriate academic department. Deadline for applications is Oct. 1, 1998. Applications providing a letter expressing interest, a curriculum vitae, and names of three references should be sent to:

Dr. Kenneth I. Berns Chair Search Committee, c/o Office of the President P.O., Box 113155 Gainesville, FL 32611-3155

The University of Florida is an Equal Opportunity, Affirmative Action Employer. Women and minorities are encouraged to apply. The "government in the sunshine" laws of Florida require that all documents relating to the search process, including letters of application/nomination and reference, be available for public inspection.



JUNIOR FACULTY POSITION IN CELL BIOLOGY

The Department of Cell and Developmental Biology invites applications for two tenuretrack faculty positions at the **Assistant Professor** level. Individuals working in fundamental mechanisms of cellular function, including areas of research such as cell cycle control, cell motility, signaling and transport, and cell polarity are encouraged to apply.

SENIOR FACULTY POSITION IN CELL AND DEVELOPMENTAL BIOLOGY

Applications are invited for a tenure track or tenured position at the **Associate Professor** or **Professor** level. Individuals with research interests in fundamental mechanisms of cellular function, such as secretion, RNA or protein processing, cell signaling, and chromatin assembly, or in vertebrate and invertebrate development, in areas such as morphogenesis, pattern formation, differentiation and determination in the early embryo are encouraged to apply.

All successful applicants are expected to establish extramurally funded research programs and participate in the training of medical and doctoral students. Candidates should submit curriculum vitae, summary of research accomplishments, future research plans, and three letters of reference by **December 1, 1998** to:

Charles P. Emerson, Jr. Chair, Department of Cell & Developmental Biology University of Pennsylvania School of Medicine Philadelphia, PA 19104-6058



AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

POSTDOCTORAL FELLOWSHIP

DNAX Research Institute, located near Stanford University, carries out basic research in Immunology and Cancer Biology in an open, academic environment. Our Postdoctoral Fellowship Program is an important feature of the research program at DNAX, representing approximately 25 percent of the Institute's scientists. Fellows who come to DNAX are entirely supported by the Institute and are provided an environment conducive to conducting basic research.

IMMUNOBIOLOGY

Dr. Jonathon Sedgwick is seeking a postdoctoral fellow with excellent molecular biological skills and a broad interest in the immunopathology of inflammatory autoimmune disease. Research will focus on changed disease patterns that follow gene targeting and the elucidation and discovery of differentially regulated molecules that may contribute to these changes.

Qualified applicants should send a curriculum vitae, a one-page statement of research interests, and the names of 3 references to the Human Resources Department, DNAX Research Institute, 901 California Avenue, Palo Alto, CA 94304. DNAX is an equal opportunity employer, m/f/h/v.





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Research on zinc finer transcriptional repressors, epithelial growth, and cancer. Postdoctoral position immediately available for a highly motivated individual to study the role of novel finger proteins in transcriptional repression and in the regulation of normal and neoplastic pancreatic epithelial cell growth. The successful candidate will be part of a multidisciplinary team using state-of-the-art molecular and cell biological techniques. Applicant should have previous experience in protein chemistry and/ or molecular biology. Send curriculum vitae and three references to:

Raul Urrutia, M.D. Gl Research Unit Mayo Clinic, Alfred 2-435 200 First Street SW Rochester, MN 55905 Fax: 507/255-6318,

e-mail: <u>urrutia.raul@mayo.edu</u> Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

FACULTY POSITION ANGIOGENESIS RESEARCH

Postdoctoral Fellow and Research Assistant Professor level.

The Department of Surgery at the Mount Sinai Medical Center is searching for applicants who have experience in the field of angiogenesis.

The focus of our program is utilizing growth factors and cell therapy to stimulate angiogenesis and treat nonhealing wounds. A second program in tumor biology is also emphasized.

Assistant Professors will have completed Postdoctoral training, have a strong publication record, and demonstrate potential to obtain independent funds.

Some experience with animals is a plus but not mandatory. Please respond to:

Mount Sinai Medical Center Harold Brem, M.D. One Gustave L. Levy Place Box 1259 New York, NY 10029



Issue Date: 16 Oct. 1998 Space Reservation Deadline: 29 Sept. 1998

A PROFILE OF HOT CAREERS

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NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION NATIONAL LIBRARY OF MEDICINE NATIONAL INSTITUTES OF HEALTH DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE RESEARCH BIOLOGIST - GS - 401 - 13

The Computational Biology Branch of the National Center for Biotechnology Information seeks a Computational Chemist/Biologist to maintain a Molecular Modeling Database and associated WWW servers, develop structure visualization tools, and perform research in the field of molecular modeling. Applications are invited from researchers having an M.D. or Ph.D. degree in the life sciences with significant postdoctoral experience. Applicants should have extensive knowledge of protein chemistry, molecular mechanics and simulation, protein structure prediction, and molecular-graphic software tools. The position requires proficiency and experience in C programming, and development of advanced WWW sites for projects in protein structure analysis. U.S. citizenship is required. The salary will be in the range of \$51,000 to \$60,000 per year, commensurate with experience. Applications will be accepted if postmarked by 10/24/98.

For further information, please contact **Dr. Stephen Bryant at** (301)-496-2475. Applicants should send applications including a curriculum vitae, bibliography, and the names, addresses, and telephone numbers of three referees directly to:

Chair Search Committee Stephen Bryant, Ph.D. National Center for Biotechnology Information National Library of Medicine NIH, Building 38A, Room 8N805 Bethesda, MD 20894 USA

Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental disability, age, or membership or nonmembership in an employee organization. NIH is an Equal Opportunity Employer.



Beckman Coulter is a \$1.7 billion dollar global life science company dedicated to the chemistry of life. Our products serve scientists on the frontiers of medical research as well as those performing clinical diagnosis of disease. We are seeking qualified individuals to join our Centrifugation team.

Product Planning Manager

This team player will be responsible for contributing to the development of the company's centrifugation Strategic Business Plan, developing product concepts, fostering and nurturing customer and industry contacts, and conducting QFD and focus groups. The ideal candidate will have an advanced degree in a life science and 5+ years of experience with a successful track record of selling and marketing to, or supporting customers in the industry. Strong communication, leadership, and business opportunity analysis skills are required.

Principal Applications Scientist

A position is available for a scientist to provide customer support and training and product development support for centrifuge

products. This scientist will assist to develop product specifications, ensure functionality of software and hardware products through laboratory experiments, develop and publish procedures for use of the centrifuge, and train customers and sales and marketing personnel. The successful candidate will have experience in the use of centrifuges including preparative and analytical types, and an advanced degree with 5 years of relevant research experience.

We offer excellent compensation and benefits package. Qualified candidates should send their résumé to: Human Resources, Beckman Coulter, 1050 Page Mill Road, Palo Alto, CA 94304; Fax (650) 859-1526. EOE. Visit us on the Internet at: www.beckmancoulter.com. Principals only, please.

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automation group leader

A Ph.D. in Chemistry or Biology, and demonstrated skills at adaptation of typical laboratory protocols and translation into engineering system requirements are required (These include combinatorial synthesis, biochemical and cellular assays, analysis and manipulation of genomic libraries.). Experience with laboratory automation and robotics systems development, component technologies, laboratory information management systems, finite element and mechanical analysis and control systems required. Software proficiency in one or more high level languages (C++ or Java preferred) is essential. Databases/user interface construction; and CAD familiarity, quality control, geometric dimensioning and tolerancing (GD&T) and documentation standards are a must. Job Code: DSB-AGL

automation specialists

A Ph.D. in Chemistry, Biology or Engineering, 2-5 years' postgraduate experience in pharmaceutical R&D and demonstrated skills at adaptation of typical laboratory protocols and translation into engineering system requirements are essential (These include combinatorial synthesis, biochemical and cellular assays, analysis and manipulation of genomic libraries.). Experience with laboratory automation and robotics systems development, component technologies, laboratory information management systems, finite element and mechanical analysis and control systems are required. Software skills in one or more high level languages (C++ or Java preferred) is a must. Construction of databases/user interfaces is preferred. Job Code: DSB-AS

Parke-Davis offers a competitive salary, bonus and stock options, and an environment that supports your professional growth. Qualified candidates please mail, fax or e-mail a scannable resume, indicating the Job Code of Interest, to: **Parke-Davis Pharmaceutical Research**, **Human Resources Department**, 2800 **Plymouth Road**, **Ann Arbor**, **MI 48105**. Fax: (734) 622-7617. E-mail: resume@aa.wl.com 7-

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Assistant Professor in Developmental and Reproductive Biology

The Department of Cell and Developmental Biology and the Center for Research on Reproduction and Women's Health invite applications for a tenure-track faculty position in developmental and reproductive biology. Individuals working in mammalian and non-mammalian systems relevant to reproduction, germ cell determination and early embryonic development are encouraged to apply. Successful applicants will have primary appointments in the Department of Cell and Developmental Biology and occupy newly constructed laboratory space in the Center for Research on Reproduction and Women's Health. Successful candidates will be expected to establish extramurally funded research programs and participate in the training of medical and doctoral students. Candidates should submit curriculum vitae, summary of research accomplishments, future research plans, and three letters of reference by December 1, 1998 to:

Dr. Norman B. Hecht and Dr. Stephen DiNardo **Co-Chairs, Faculty Search Committee** c/o Victoria McManus 243 Anatomy-Chemistry Building University of Pennsylvania School of Medicine Philadelphia, PA 19104-6058



AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

Symposium



Boston Biomedical Research Institute Presents the Second John C. Seidel Memorial Symposium on Smooth Muscle Cells: Structure, Motility and Signaling

April 11-14, 1999, at the Marine Biological Laboratory, Woods Hole, Massachusetts

Cytoskeleton and Cell Remodeling Thick Filament-Based Regulation of Contractility Thin Filament-Based Regulation of Contractility Signal Transduction in Smooth Muscle Cells **Gene Expression**

Speakers include:

Leonard Adam, Bradford Berk, Samuel Chacko, Joseph Chalovich, Susan Gunst, Joe Haeberle, David Hartshorne, John Hartwig, David Helfman, Paul Herring, Mitsuo Ikebe, Arthur Lee, William Lehman, Thomas Lincoln, Steven Marston, Kathleen Morgan, Michael Parmacek, Harold Singer, Victor Small, Andrew Somlyo, Thomas Stossel, James Stull, Kathleen Trybus, Michael Walsh, Albert Wang, David Warshaw

> Special Lecture by Eric Olson on **Transcriptional Control of Cardiovascular** Development and Disease

Registration Fee (\$400) includes 3-day room and board Registration and Abstract Deadline: January 10, 1999 As the number of conferees is limited, early registration is strongly recommended.

For Program and Registration Form, please visit our website: http://www.bbri.harvard.edu/seidel_99.html or contact Symposium Secretary Ms. Mary Caulfield at: **Boston Biomedical Research Institute** 20 Staniford Street, Boston, MA 02114. Tel: (617) 912-0370; Fax: (617) 912-0308



SCIENTIST Cancer Genomics & Drug Discovery

(Cold Spring Harbor, New York)

Tularik Inc. is a privately-held biopharmaceutical company committed to the discovery and development of novel small molecule drugs that act through the regulation of gene expression. Tularik has initiated a cancer drug discovery program incorporating state-of-the-art genomics technologies. We currently have a rare opportunity for a dedicated researcher to participate in this leading-edge program and help us shape the future of human cancer therapeutics.

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

In addition to an exciting environment, competitive salaries, comprehensive benefits and employee stock options, Tularik offers experienced leadership and a stimulating research environment that encourages scientific publication and recognizes achievement. To be considered for this exciting position, please send, fax or email your resume to:

Tularik Inc.

HR Dept., Position Code: A01 Three Technology Dr., Suite 200 East Setauket, NY 11733 Fax: (516) 689-1489 email: resume@tularik.com

www.tularik.com

FOF

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF MENTAL HEALTH Division of Basic & Clinical Neuroscience Research

Tularik

Creating Drugs That Regulate Genes

The National Institutes of Health, National Institute of Mental Health, invites applications for extramural program positions located in the newly created Clinical Neuroscience Research Branch, Division of Basic and Clinical Neuroscience Research:

 Chief, Clinical Neuroscience Research Branch (GS-15) Incumbent is responsible for planning and administering a nationwide program of support for research into the neural bases of schizophrenia, mood, and other brain disorders at the molecular, cellular, and integrative levels.

- Chief, Molecular & Cellular Bases of Schizophrenia,
- Mood & Other Brain Disorders Program (GS-13/14)* • Chief, Integrative Neuroscience of Schizophrenia, Mood
- & Other Brain Disorders Program (GS-13/14)*

*The incumbent will manage and develop a portfolio of extramural research grants involving clinical neuroscience approaches to understanding the bases of complex mental disorders such as schizophrenia, mood and other brain disorders.

Qualifications include an M.D. with a specialty in psychiatry or a Ph.D. in a relevant basic science discipline with significant training and experience in clinical neuroscience. GS-15 Civil Service positions have a salary range from \$77,798 to \$101,142 per annum (with locality pay) which includes special salary for Medical Officers. GS-13/14 positions have a salary range from \$55,969 to \$90,426 per annum (with locality pay) which includes special salary for Medical Officers. Physicians may be eligible for a Physician's Comparability Allowance (PCA) between \$5,000-\$20,000 a year.

A copy of the full text vacancy announcement is available via the World Wide Web: http://www.nimh.nih.gov/orm/pmb/nimhjobs.htm. Interested candidates may contact Ms. Margot Darby, NIMH Personnel Management Branch, at (301) 443-9094. Applications will be accepted if postmarked by November 6, 1998 and received within 5 working days.

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National Institutes of Health

National Center For Research Resources

Associate Director For Research Infrastructure

The National Center for Research Resources invites applications for the position of Associate Director for Research Infrastructure (ADRI), NCRR, NIH. The ADRI is responsible for: (1) directing the Research Infrastructure area and developing and implementing plans to enable NCRR to enhance the effectiveness of the RI programs, while providing scientific leadership in the planning, formulation, program review, development and evaluation of all activities that are encompassed by this area, all of which impact the conduct of biomedical research at the National level; (2) managing programs that address biomedical research faculty and facility-development at a wide range of institutions, including minority institutions; programs designed to improve biomedical research facilities through matching grants for construction and renovation; and programs that enhance science education and skills for K-12 students, their teachers and the lay public. The ADRI integrates these programs into the NIH agenda and establishes priorities for using these programs to achieve NIH's and NCRR's long-range objectives. The Research Infrastructure area currently include the following programs; Research Centers in Minority Institutions, RCMI Clinical Research Infrastructure Initiative, Research Infrastructure in Minority Institutions, Research Facilities Improvement, Animal Facilities Improvement, the Institutional Development Award, and the Science Education Partnership Award.

Applications must have a Doctor of Medicine or a Ph.D. in one of the health sciences (or equivalent combination of experience and training) plus senior level medical/biomedical research experience that demonstrates the following mandatory qualifications: (1) Research-related managerial and research experience which provide the ability to develop, implement, and administer extramural research programs involving shared research resources, institutional and faculty development, as well as research facility development; and (2) extensive knowledge of biomedical research, including current research techniques, kinds of equipment used in biomedical research, and facilities needs for the conduct of state-of-the-art biomedical research in the rapidly changing extramural research community. This is a permanent full-time position with a salary range of \$106,412 to \$125,900 per annum commensurate with qualifications. Physicians may be eligible for a Physician Compatibility Allowance ranging from \$5,000 to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-federal selectee for this position. A relocation bonus of up to 25% of base pay (subject to approval) may be available to a permanent Federal employee who must relocate to accept this position. A one year probationary period must be served by the individual selected if not currently or previously in the Senior Executive Service.

Send applications to Ms. Pathenia Wiggins, National Institutes of Health, National Center for Research Resources (NCRR), 9000 Rockville Pike, Building 31, Room 3B43, Bethesda MD 20892. For application forms and a copy of the requirements contact Ms. Wiggins at NCRR on (301) 496-1524. Deadline for applications is <u>November 2</u>.

<u>Public Health Service Commissioned Officers</u> interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

- Applicants with internet access may browse the NIH Home Page to view the full text vacancy announcement at http://helix.nih.gov:8001/jobs/
- OPM now requires five executive core qualifications be met by individuals being recommended for appointment to the SES. Information about these qualifications can be requested from the NCRR Personnel Office or found on the Web at http://www.opm.gov/ses/html.ecq4.htm
- Applicants may browse the NCRR Home Page at http://www.ncrr.nih.gov

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Applicants may e-mail materials to patw@nih.gov

POSITIONS OPEN

PROFESSOR. 85661T, I5, Department of Anatomy and Reproductive Biology, University of Hawaii at Manoa, John A. Burns School of Medicine, extramural funds, full-time, 11-month, temporary, non-tenurable, annually renewable depending on performance and funding availability, to begin approximately November 1998. Duties: participate in an active research group that investigates basic biology of animal cloning and its application to veterinary and human medicine (cell and tissue therapy); teach courses, seminars, and/or sections of independent study, as assigned. Minimum qualifications: Ph.D. or D.V.M. in anatomy or other biomedical science. Also included, but not limited to, at least four years at the rank of Associate Professor or equivalent, evidence of excellence in teaching; research productivity and publications that have resulted in significant recognition by national and international scholars active in the same field; a good record of extramural funding; and demonstrated ability to plan and organize assigned activities including supervision of Assistants. Desirable qualifications: evidence of ability to apply skills and knowledge in cell biology, molecular biology, genetics, embryology, and reproductive biology; at least two years of experience in micromanipulation of animal gametes/zvgotes/preimplantation embryos leading to successful mammalian cloning. Minimum annual salary: \$62,376. To apply: submit letter of application, curriculum vitae, names of three references to: Dr. Scott Lozanoff, Chairman, Department of Anatomy and Reproductive Biology, University of Hawaii School of Medicine, 1960 East-West Road, Room T-311, Honolulu, HI 96822. Closing date: all application materials must be received by October 12, 1998. An Equal Employment Opportunity/Affirmative Action Institution

FACULTY POSITIONS PROTEIN STRUCTURAL BIOLOGY

The Biochemistry Department at North Carolina State University invites applications for two tenure-track faculty positions in protein structural biology at the ASSIST ANT PROFESSOR level. Individuals with strong research programs in other areas of biochemistry may also be considered. The new positions will complement existing areas of excellence in protein biochemistry, nucleic acid structure/function, NMR, molecular virology, and plant molecular biology. The Department is in the College of Agriculture and Life Sciences, is affiliated with the College of Physical and Mathematical Sciences, and has interactions with many scientists in the Research Triangle area. Both positions have competitive start-up packages. Qualified applicants should provide a curriculum vitae, a research statement, a description of teaching interests, and three letters of reference. The review process will begin October 15, 1998, and continue until the positions are filled. Applicaton material should be sent to:

Chair, Faculty Search Committee Department of Biochemistry Box 7622, 128 Polk Hall North Carolina State University Raleigh, NC 27695-7622 Website: http://www2.ncsu.edu/ncsu/cals/ biochem/index2.htm

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, veteran status, or disability.

FACULTY POSITIONS DIVISION OF BASIC SCIENCES Fred Hutchinson Cancer Research Center

The Division of Basic Sciences of the Fred Hutchinson Cancer Research Center is soliciting applications at the **JUNIOR FACULTY** level. Applicants with outstanding accomplishments in any field of molecular, cellular, and or developmental biology will be considered. Candidates should send a curriculum viate, a concise statement of his/her research plans, and three letters of reference to:

Basic Sciences Faculty Search Committee Fred Hutchinson Cancer Research Center Division of Basic Sciences Mailstop: A2M-015 1100 Fairview Avenue North P.O. Box 19024 Seattle, WA 98109-1024

Application deadline: October 15, 1998

FHCRC is an Equal Opportunity Employer committed to work force diversity and provides a smoke-free environment. We strongly encourage applications from women and minority groups

POSITIONS OPEN

ENTOMOLOGIST

The Department of Biology at the University of Northern Iowa (website: www.uni.edu) invites applications for a tenure-track ASSISTANT PROFESSOR effective August 1999. The individual will teach entomology, plant-animal interactions, ecology, and share in the teaching of general education courses. The successful candidate will be expected to develop a research program that involves undergraduate and Master's students and includes the potential to collaborate with faculty colleagues. The department expects effectiveness in both teaching and research. A Ph.D. in a biological science is required. Teaching and postdoctoral research experience are desired.

Applications must be received by October 30, 1998, to be given full consideration. Please submit a curriculum vitae, transcripts, separate statements of interests and goals in both teaching and research, and have three letters of reference sent to:

Dr. Jill Trainer Chair, Search Committee Department of Biology University of Northern Iowa Cedar Falls, IA 50614-0421 FAX: 319-273-7125 E-mail: jill.trainer@uni.edu

The University of Northern Iowa is an inclusive academic community, hospitable to all. The University of Northern Iowa is an Equal Opportunity Educator and Employer with a compre-hensive plan for Affirmative Action. The department encourages applications from minority persons, women, Vietnam-era veterans, and disabled persons.

TENURE-TRACK FACULTY POSITION IN STRUCTURAL BIOLOGY

The School of Biological Sciences, University of Missouri-Kansas City (UMKC), invites applications for a ten-ure-track faculty position (ASSISTANT or ASSOCI-ATE PROFESSOR) in structural biology. Consideration will be given to applicant research areas compatible with, but not limited to, existing lines of the School's research focus on molecular recognition, including mac-romolecular assembly. We seek an outstanding scholar with demonstrable achievements in research, teaching experience in an English-language institution, and exemplay communication and supervisory skills. Teaching activities will involve participation in at least two of the fol-lowing disciplines: biophysics, biochemistry, molecular biology, cell biology. State-of-the-art research facilities, competitive salary, start-up funds, and fringe benefits are available. Review of applications will begin September 15 1998, and will continue until the position is filled. Submit curriculum vitae with summary of present and future re-search interests, and request that three letters of recommendation be forwarded to: Cell Biology and Biophys ics Search Committee, Division of Cell Biology and Biophysics, School of Biological Sciences-BSB 403 University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499. Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN ENVIRONMENTAL MICROBIOLOGY

The Department of Soil, Water, and Environmental Science, University of Arizona, invites applications for a tenure-track faculty position at the ASSISTANT or AS-SOCIATE LEVEL. Relevant areas of interest include the aerobic/anaerobic biotransformation of organic and inorganic contaminants, growth and distribution of microorganisms in the environment, the influence of microorganisms on natural and contaminated environments, and the fate of introduced organisms/pathogens in the environment. The successful applicant will develop an active research program that complements an existing team of Environmental Microbiologists, Chemists, and Physicists within the department. He/she will be expected to develop a teaching program that serves both the Environmental Science Program and the Undergraduate Program in Microbiology. To apply send a curricultum vitae, a two-page statement of research and teaching interests, and three letters of recommendation to: Dr. Raina Maier, Department of Soil, Water, and Environmental Science, University of Arizona, Tucson, AZ 85721. Review of applications will begin November 30, 1998, and continue until the position is filled. The University of Arizona is an Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

TWO ASSISTANT PROFESSORS IN CHEMISTRY THE UNIVERSITY OF WESTERN ONTARIO

The Department of Chemistry is inviting applications for two tenure-track positions at the rank of Assistant Professor in analytical, organic, or theoretical chemistry. Although candidates in all areas of theoretical chemistry will be considered, there is some preference for those with research interests in statistical mechanics/computer sim-ulations. Applicants must have a Ph.D. degree or equivalent and suitable postdoctoral experience. The successful candidates will be expected to establish independent, externally funded research programs in their respective fields of expertise and to participate with enthusiasm in teaching undergraduate and graduate courses in chemistry. The Department of Chemistry (website: www.uwo.ca/ chem) is a large, research-intensive department with strong programs in many areas of chemistry and with good interdisciplinary linkages to research groups in other departments in the Faculties of Science, Engineering, and Medicine and Dentistry.

Interested candidates should send their curriculum vitae, names of three references, along with a description of research accomplishments, and a proposal for future research with an approximate budget to: Dr. N. O. Petersen, Department of Chemistry, The University of Western Ontario, London, Ontario N6A 5B7 Canada. E-mail: petersen@julian.uwo.ca. The search committees will begin deliberations of applications on No-vember 30, 1998.

Positions are subject to budget approval. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Western Outario is committed to Employment Equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disability

ECOLOGIST. The Department of Biology at Franklin & Marshall College announces a tenure-track opening at the **ASSISTANT PROFESSOR** level, starting July 1999. We seek applicants with strength in community ecology, preferably of freshwater systems, to complement existing staff expertise in our 13-member department. Candidates should have the Ph.D., a strong commitment to both teaching and research, and the ability to engage undergraduates in field and laboratory investigations in local ecosystems. Teaching responsibilities will include (1) lecture and laboratory secions of a core course in evolution, ecology, and Mendelian genetics; and (2) an elective in general ecology or the candidate's specialty. Opportunity also exists for participation in the College's interdisciplinary environ-mental studies program. Franklin & Marshall (enrollment 1,800) is a coeducational liberal arts college with a tradition of excellence in science and student research. Applications should include (1) curriculum vitae, (2) statements of teaching and research philosophy and ex-perience, with ideas for actively engaging students in learning, and (3) copies of undergraduate and graduate transcripts; also (4) please arrange for three letters from referees. Complete applications should be received by October 15, 1998, by: J. L. Richardson, Search Committee Chair, Department of Biology, Franklin & Marshall College, Lancaster, PA 17604-3003. Tele-phone: 717-291-4118; FAX: 717-399-4548; e-mail: c_mcintyre@acad.fandm.edu; website: www. fandm.edu/Departments/Biology/Biology.html. The College is committed to cultural pluralism through the hiring of minorities and women. Equal Opportunity Employer/ Affirmative Action.

ASSISTANT PROFESSOR. SUGARCANE BREED-ER and other gramineous crops. Full-time research, 12month appointment with the Texas A&M University System Agricultural Experiment Station. Ph.D. in agronoin molecular biology, or plant breeding with background in molecular biology. Duties include planning and execution of experiments; collection, processing, and interpretation of data; and publication of results. Designs and supervises planting and harvesting of field trials. Respon-sible for supervising from four to 10 workers. Works in cooperation with a team of Molecular Biologists on site and on campus in the molecular biology of gramineous crops and integrates the activities of local scientists with projects on sugarcane and related crops. Closing date is October 15, 1998, or until a suitable candidate is found. For more information, or to apply, **Telephone: 956**-968-5585. The Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

POST-DOCTORAL FELLOW

The Pulmonary - Critical Care Medicine Branch (P-CCMB) National Heart, Lung, & Blood Institute, NIH

Post-doctoral research fellowship positions are available for individuals interested in cell and molecular biology, as well as bench-to-bedside translational research. Opportunities for post-doctoral research fellowships exist within intramural P-CCMB laboratories investigating clinical and basic research relating to signal transduction, nitric oxide, G proteins, protein modification, vesicular trafficking and cyclic nucleotide phosphodiesterases. Positions are available for a minimum of 2 years and may be extended for additional training. Candidates should possess a Ph.D. or M.D. degree or equivalent. Positions are available immediately. Interested individuals should submit a letter of interest, curriculum vitae, and three letters of recommendation to: Joel Moss, M.D., Ph.D., Chief, Pulmonary-Critical Care Medicine Branch, NHLBI, NIH, Building 10, Room 6D03, MSC 1590, Bethesda, Maryland 20892-1590.

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BC Cancer Research Centre

Vancouver, British Columbia, Canada

The BC Cancer Research Centre offers a multidisciplinary, translational research environment with approximately 250 staff members, including 45 scientists as well as 95 graduate students and post-doctoral fellows. Research departments include Advanced Therapeutics, Cancer Control Research, Cancer Endocrinology, Cancer Imaging, Medical Biophysics and Experimental Hematopoiesis (Terry Fox Laboratory), plus the evolving Genome Sequence Centre is adjacent. The Research Centre maintains an active graduate training program through cross-appointments of its senior scientists with the departments of Pathology and Laboratory Medicine, Physics and Medicine as well as Medical Genetics at the University of British Columbia.

The Terry Fox Laboratory and the Medical Biophysics Department of the BC Cancer Research Centre have two full-time positions for senior research scientists. Successful candidates will be expected to develop vigorous, independent research programs and to be eligible for appointment at the assistant or associate professor-level.

Terry Fox Laboratory

The Terry Fox Laboratory is a highly interactive, interdisciplinary facility with a staff of approximately 120 including 11 senior scientists as well as 55 graduate students and post-doctoral fellows. Its mandate is to carry out basic and applied cancer research with an emphasis on the cellular and molecular biology of hematopoiesis and immunology (www.terryfox.ubc.ca). The Terry Fox Laboratory provides a spectrum of capabilities including transgenic and gene knockout, FACS and level III facilities.

You will complement existing expertise by establishing a research program in molecular and cellular biology, developmental biology and/ or functional genomics. There are also opportunities for collaboration with other members of the BC Cancer Research Centre.

Please apply to Dr Allen Eaves, Director, Terry Fox Laboratory (fax: 604.877.0712) at the address below.

Medical Biophysics Department

The Medical Biophysics Department has an ongoing commitment to studies in molecular and cellular radiation biology as well as translational research in tumour biology and therapy (www.bccancer.bc.ca). A staff of approximately 40 individuals includes 5 senior scientists as well as 12 graduate students and post-doctoral fellows. Resources include flow and image cytometry, cell sorting and novel tumour model systems *in vitro* and *in vivo*.

You will be expected to contribute to under-graduate and graduate teaching in radiobiology, and the training of radiation oncology residents. Preference will be given to individuals viewed as likely to develop interdepartmental collaborations within the BC Cancer Research Centre and/or translational research programs with BC Cancer Agency physicians.

Please apply to Dr Ralph Durand, Head, Medical Biophysics Department (fax: 604.877.6002) at the address below.

The screening of applicants will begin October 1, 1998 and continue until each position is filled. In accordance with Canadian Immigration policy, priority will be given to Canadian citizens and permanent residents.



Please forward a current curriculum vitae, a description of your proposed research program and the names/addresses of three referees, to:

BC Cancer Research Centre BC Cancer Research Centre, 601 West 10th Avenue, Vancouver, BC V5Z 1L3, Canada.

M13115

POSITIONS OPEN

Carleton College Department of Biology invites applications for two tenure-track positions at the rank of **AS**-SISTANT PROFESSOR.

NEUROBIOLOGIST—CELL BIOLOGIST

Teaching responsibilities will include an upper-level course in neurobiology with laboratory, a sophomorelevel course in cell biology with laboratory, involvement in the introductory biology sequence, and a junior/senior seminar course in candidate's area of expertise.

ECOSYSTEMS ECOLOGIST

Teaching responsibilities will include an upper-level course in ecosystems ecology with laboratory, a course in the biology of global change with laboratory, involvement in the introductory biology sequence, and a junior/ senior seminar course in candidate's area of research. We are particularly interested in expertise in primary productivity or wetland/aquatic systems.

The successful candidates for both positions will be expected to maintain an active research program involving undergraduates. Carleton is engaged in efforts to attract, retain, and nurture underrepresented groups in the sciences; we seek candidates with particular interest and strength in these areas. Ph.D. required, postdoctoral experience preferred. Send letter of application, curriculum vitae, statement of teaching philosophy, summary of research experience and goals, undergraduate and graduate transcripts, and three letters of reference to: Mark McKone, Department of Biology, Carleton College, Northfield, MN 55057-4025. Application deadline is 23 October 1998. Carleton College is an Equal Opportunity/ Affirmative Action Employer. Women and minority candidates are strongly encouraged to apply.

ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOPHYSICS THE JOHNS HOPKINS UNIVERSITY

The Department of Biology, The Johns Hopkins University invites applications for a tenure-track faculty appointment in the fields of biochemistry/molecular biophysics. Regardless of area of research, we are only interested in applicants of the very highest caliber with a demonstrated outstanding record of research. The successful candidate will be expected to establish a vigorous research program and to participate in graduate and undergraduate teaching.

Information about the Department's faculty, research interests, and resources may be obtained at the Department's website: http://www.bio.jhu.edu/.

Applicants should submit a curriculum vitae (including the names and addresses of three referees) together with a statement of current and planned research, and arrange to have three letters of recommendation sent to:

Dr. Ernesto Freire, Chair Search Committee in Biochemistry/ Molecular Biophysics Department of Biology The Johns Hopkins University 3400 North Charles Street Baltimore, MD 21218

Deadline for receipt of applications is October 31, 1998.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.

BIOCHEMISTRY/CLINICAL CHEMISTRY POSITION AND FORENSIC CHEMISTRY POSITION West Chester University

West Chester University of Pennsylvania's ACS-certified chemistry department invites applications for two tenure-track positions at the rank of **ASSISTANT PRO-FESSOR** beginning August 1999: (1) biochemistry/ clinical chemistry, and (2) forensic chemistry. Applicants must demonstrate excellence in scholarship and undergraduate and graduate instruction. The minimum requirements are a Ph.D. or equivalent in chemistry, demonstrated expertise in the appropriate subdiscipline, potential for the development of an active research program, and the ability to teach and communicate effectively. West Chester University is located 20 miles west of Philadelphia, and draws on a diverse population of students from urban, suburban, and rural areas. Contact: **H. Reid, Chemistry Search Committee, West Chester University, West Chester, PA 19383.** Or see our website for the complete requirements for each position, **website: www.wcupa.edu/_academics/sch_cas.che/.** Equal Opportunity Employer/Affirmative Action.



The Haverford College Department of Cellular, Molecular, and Developmental Biology (website: www. haverford.edu/biology) seeks a tenure-track ASSIST ANT PROFESSOR, beginning in the 1999–2000 aca-demic year, in molecular neurobiology. The successful applicant will contribute to our introductory curriculum, teach upper-level courses in areas of expertise, and participate actively in an interdisciplinary area of concentration in neurobiology and behavior. S/he will maintain an acive research program engaging undergraduate students in the study of an important biological problem at the molecular level for which teaching credit will be granted. Possible research areas include developmental neurobiology and the molecular biology of excitable cells. At least two years of postdoctoral experience are required. Send curriculum vitae, one- to two-page description of teaching philosophy and research plans, and three letters of reference by November 3, 1998, to: Ms. Tessa Canavan, Biology Search Secretary, Haverford College, 370 Lancaster Avenue, Haverford, PA 19041-1392. Questions about the position may be directed to: Prof. Karl Johnson or Prof. Jennifer Punt, Telephone: 610-896-1187.

Haverford College, located 10 miles west of Philadelphia, is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are especially encouraged to apply.

ASSISTANT PROFESSOR DEPARTMENT OF PHARMACOLOGY AND PHYSIOLOGY University of South Carolina

Tenure-track position at the Assistant Professor level is available the summer of 1999. The person selected will be expected to develop an independent research program with external funding and teach medical and graduate students. Areas of research are open to individuals using modern techniques to investigate physiological problems. Centers of Research Excellence (COREs) exist in cancer, cardiovascular research, neuroscience, and geriatrics. It is expected that the individual will have a Ph.D. or M.D. with a minimum of two years of postdoctoral experience. Potential for development and maintenance of an externally funded, independent research program will be evaluated.

The Department consists of 14 full-time faculty and numerous adjunct and joint appointees. The Department is housed in modern facilities along with the other basic science departments of the School of Medicine. Ample opportunities exist for collaboration with other Investigators. Interdisciplinary research is encouraged.

Candidates should submit a letter describing professional goals, a curriculum vitae, and the names of three references to: Dr. Donald O. Allen, Professor and Chair, Department of Pharmacology and Physiology, School of Medicine, University of South Carolina, Columbia, SC 29208. Website: http://www.med. sc.edu/PHYSIOLO/PHYSIOLO.HTML.

USC is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR MICROBIOLOGY

The University of New Mexico Biology Department is seeking applicants for one or more tenure-track positions in microbiology at the Assistant Professor level to begin August 16, 1999. Minimum requirements: Ph.D. in relevant discipline. Preferences: postdoctoral experience; develop an independent, externally funded research program employing molecular approaches in one of the following areas: prokaryotic evolutionary biology, ecology, physiology, immunology, or virology; commitment to excellence in teaching general microbiology and area of specialty; and ability to work in a highly diversified depart-ment. Competitive salary and start-up funds provided. Specific information concerning job requirements and ap-plication can be obtained at website: http://biology. unm.edu/Welcome.html or requested by FAX to: Microbiology Search Committee, Department of Biology, University of New Mexico, Albuquerque, NM 87131-1091. FAX: 505-277-0304; Telephone: 505-277-3411. Completed applications must be received by November 9, 1998.

UNM is an Affirmative Action/Equal Opportunity Employer and Educator.

POSITIONS OPEN

ASSISTANT PROFESSOR MICROBIOLOGY

The Department of Molecular and Cell Biology at the University of Connecticut invites applications for a tenure-track Assistant Professor position in the area of bacterial pathogenesis. Preference will be given to Microbiologists conducting research in the general areas of intracellular signaling, biofilm formation, and evolution of pathogenesis. The successful applicant is expected to establish a productive research program, teach an undergraduate course in pathogen microbiology, and contribute to graduate courses. The starting date is September 1999. Applicants must have postdoctoral experience and an outstanding research record. Microbiology at UConn boasts strong research in the areas of microbial physiology, diversity, and the molecular biology and evolution of prokaryotes. In 1999, research space in a new building will become available. The Storrs campus, situated in rural northeastern Connecticut, is the main campus of the University of Connecticut.

Submit a curriculum vitae, a concise statement of research and teaching interests, and three letters of recommendation to: Dr. Kenneth M. Noll, Chair, Microbiology Search Committee, Department of Molecular and Cell Biology, U-44, University of Connecticut, Storrs, CT 06269. Review of applications will begin after publication of this notice and continue until the position is filled. The Department's World Wide Web page is website: http://www.mcb.uconn.edu. We encourage applications from underepresented groups, including minorities, women, and people with disability. (Search #99A70)

BIOLOGICAL CHEMISTRY DARTMOUTH COLLEGE

Applications are invited for a faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level starting July or September 1999. The Chemistry Department seeks an individual who will establish a nationally recognized research program in biophysical, bioinorganic, or bioorganic chemistry at Dartmouth, and who will excel at teaching in our undergraduate and Ph.D. curricula. Preference will be given to individuals who conduct experimental research on the structurethrough studies of their chemical, physical, and struc-tural properties. Leadership and undergraduate teach-ing in this area is expected, as is the ability to offer graduate courses in one's specialty and to teach introductory courses either in general or organic chemistry. Applicants should submit a curriculum vitae, a statement of their scientific accomplishments and future re-search directions, and a statement about their teaching experience and interests. Applicants should also arrange to have three letters of recommendation sent on their behalf. All inquiries and applications will be treated confidentially. Application materials should be sent to: Pro-fessor Dean E. Wilcox, Biological Chemist Search Committee, Department of Chemistry, 6128 Burke Laboratory, Dartmouth College, Hanover, NH 03755-3564. The Committee will begin to consider completed applications on October 15, 1998. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

ECOLOGIST/POPULATION BIOLOGIST

The Biology Department at Santa Clara University invites applications for an **ASSISTANT PROFESSOR**, tenure-track position in ecology/population biology starting September 1999. A Ph.D., demonstrated teaching ability, and postdoctoral experience are required. Expertise sought in community/ecosystem ecology with a strong preference for candidates combining mathematical and theoretical approaches with field studies. Teaching responsibilities will include upper and lower-division lecture and laboratory courses for majors and non-majors. The successful candidate will also be expected to develop a strong research program that includes undergraduate participation.

Applicants should submit (1) curriculum vitae, (2) statement of current and future research plans, (3) statement of teaching experience, and (4) three letters of recommendation to: Chair, Ecologist/Population Biologist Search Committee, Biology Department, Santa Clara University, Santa Clara, CA 95053. The dead-line for application is November 1, 1998. Santa Clara University, a Jesuit Institution, is an Equal Opportunity/Affirmative Action Employer and velcomes applications from women, persons of color, and members of other historically underepresented U.S. ethnic groups.

Executive Director ILSI Risk Science Institute



The International Life Sciences Institute (ILSI), a worldwide non-profit, scientific foundation, seeks an executive director for its Washington DC-based Risk Science Institute (RSI). The ILSI RSI was established in 1985 to improve risk assessment methodology by strengthening the scientific principles on which risk assess-

ments are based. The position responsibilities include identifying critical areas where research is needed to improve the methodology of assessing human health risks; managing ILSI RSI scientific programs; providing oversight and guidance for grants with outside agencies, including the U.S. government; proposing and administering a yearly budget; staff management and development; and identification and maintenance of funding sources for RSI programs. Requirements include a relevant degree (M.D. or Ph.D. in toxicology, pharmacology, or related science) a minimum of ten years of progressively responsible scientific and managerial experience at an executive and/or senior staff level; outstanding communication skills; knowledge of government grant and contract procedures and regulatory affairs; the ability to analyze and critique scientific documents; and the ability to work cooperatively and collaboratively with individuals at all levels. Please send resume, including salary history and requirements, to the ILSI Administrator, 1126 16th St., NW, Washington, DC 20036 or fax to 202-659-3859. EOE/MF

FACULTY POSITION MOLECULAR CARDIOLOGY PROGRAM

The Molecular Cardiology Program at the University of Chicago invites applications for a tenure-track position at the Assistant or Associate Professor level. The successful candidate has an M.D. and/or Ph.D with research experience in the areas of molecular and cellular biology, developmental biology and/or human and mouse genetics. Applicants should submit a curriculum vitae, summary of research accomplishments, and three letters of recommendation to: Jeffrey M. Leiden, M.D., Ph.D, Molecular Cardiology Search Committee, The University of Chicago, 5841 S. Maryland, MC 6080, Room B608, Chicago, IL 60637.



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Clone and engineer genes from metabolic pathways. BS degree with 5-7 years experience or MS degree with 2-3 years experience in Molecular Biology, Microbiology or relevant field required. Broad experience in DNA techniques and bacterial genetics is essential. Background in protein isolation and enzyme assay methods is a plus. Experience with gram-positive organisms is highly desirable. Dept. MBI.

Research Scientist - Molecular Biology II

Clone and engineer novel genes from eukaryotic systems. BS degree with 5-7 years experience or MS degree with 2-3 years experience in Molecular Biology, Biochemistry or relevant field required. Ability to plan and execute multiple tasks and to master new techniques are essential. Background in gene expression and protein analysis is a plus. Experience with plants or cell biology and tissue culture is highly desirable. Dept. MBII.

Research Scientists -Bioprocess Development (2 positions)

Work on the development of microbial processes including performing maintenance of culture stocks; media preparation and optimization; cultivation in shake flask and fermenter; operation of bioreactors; sample analysis; process evaluation, optimization and scale-up. Additionally, one position will include downstream processing of fermentation broth. BS degree with 5-7 years experience or MS degree with 2-3 years in fermentation process development required. The ability to work independently, to apply creativity to problem solving, and to communicate effectively in a team environment is necessary. Working knowledge of pilot plant is a plus. Dept. BP.

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POSITIONS OPEN

ASSISTANT PROFESSOR. Soil ecology. The Department of Plant Pathology at North Carolina State University is seeking applications for a tenure-track, 12 month position to investigate the ecology of soil-borne plant pathogens including plant-parasitic nematodes. This is an 80 percent research, 20 percent teaching position with responsibilities for developing a competitive, nationally and internationally recognized research and teaching program. Research may focus on the population biology or genetics of soil-borne plant pathogens or on the community ecology of root pathogens. The appointee also will be expected to mentor graduate students and develop or participate in an upper-level graduate course in their area of expertise. The Department of Plant Pathol-ogy has a strong core of faculty with programs on soilborne pathogens and the appointee will be expected to complement existing programs. The opportunity also exists to collaborate in interdisciplinary and interdepart-mental programs within the College of Agriculture and Life Sciences. The start-up package will include a full-time Technician. Applicant must have a Ph.D. in plant pathology or related field and an in-depth knowledge of soilborne organisms/soil systems. Postdoctoral experience is desirable. Applications will be accepted until November 30, 1998, or until a suitable candidate is identified. Interested individuals should send a letter of application, curriculum vitae, transcripts, statement of research interests, and three letters of reference to: Dr. O. W. Barnett, Head, Department of Plant Pathology, North Caro-lina State University, Box 7616, Raleigh, NC 27695-7616. North Carolina State University is an Equal Opportunity/ Affirmative Action Employer. Women and minority scientists are encouraged to apply

TENURE-TRACK ASSISTANT PROFESSOR

The Department of Physiology, College of Medicine, invites applications for a full-time tenure-track Assistant Professor position. The successful candidate will be a Mammalian Physiologist who will develop an extramurally funded independent research program in the area of vascular biology and/or stroke. Initial support will be provided by the Howard Hughes Medical Research Re-sources Program for Medical Schools. Applicants must have a Ph.D., M.D., or equivalent, and postdoctoral experience in cellular/molecular approaches to physiological problems. The primary appointment will be in the Department of Physiology, with extensive interaction en-couraged across departments of the Interdisciplinary Graduate Program in Biomedical Sciences at the Health Science Center. The candidate may complement current departmental and college strengths in the areas of hypertension, signal transduction, fetal/maternal physiology, neuroendocrinology, membrane transport and ion channels, developmental genetics, and other interests described at our website: http://www.med.ufl.edu/phys/index. html. Responsibilities will include participation in departmental teaching and educational programs. Submit a curriculum vitae, including a statement of research plans, and have three letters of reference sent to: Dr. Bruce R. Stevens, Scarch Committee Chair, Department of Physiology, College of Medicine, University of Flori-da, P.O. Box 100274, Gainesville, FL 32610-0274. Salary is negotiable. Application deadline is November 1, 1998, and anticipated start date is April 1, 1999. Equal Europoyment Opportunity/Affinnative Action Employer.

ASSISTANT/ASSOCIATE PROFESSORS DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS Harvard Medical School

The Department of Microbiology and Molecular Genetics invites applications for two tenure-track faculty positions at either the Assistant or Associate Professor level. The successful candidates will conduct independent research in virology, particularly in the areas of viral pathogenesis, cell biology, replication, and host immune re-sponse to viral infection. The successful candidates will also participate in teaching graduate and medical students. Applicants should possess a Ph.D. or M.D. degree and have at least two years of postdoctoral training. Applicants should send a curriculum vitae, selected reprints, a short summary of research interests, and the names and addresses of four references to: Dr. John Mekalanos, Chair, Department of Microbiology and Molecular Genetics, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

POSITIONS OPEN

PLANT GENETICIST

Tenure-track position at ASSISTANT PROFESSOR level to begin September 1999; Ph.D. and postdoctoral experience required. The Biology Department at Western Washington University invites applications from Plant Geneticists; experience in plant physiology is desired. Teaching responsibilities will include introductory biology, genetics, plant physiology, and advanced courses in the specific area of expertise. The successful applicant will be expected to maintain an active research program involving advanced undergraduate and graduate (M.S.) students, and to seek extramural funding. The department is committed to excellence in undergraduate teaching, with student research playing an important role in the educational process. Facilities to support this position are located in a new biology building, and include a greenhouse, tissue culture teaching laboratory, and herbarium. Appli-cants should submit a curriculum vitae, concise statements of interests and accomplishments in both teaching and research, a transcript or list of science coursework and the names, addresses, telephone numbers, and e-mail addresses of four references to: Carol Trent, Search Committee Chair, Department of Biology, MS-9160, Western Washington University, Bellingham, WA 98225. Telephone: 360-650-2869; WA ST TTY Relay: 1-800-833-6388; FAX: 360-650-3148; e-mail: trent@biol.wwu.edu. Full position description and application requirements at website: http://www.ac. wwu.edu/~biology/. Review will begin 2 November 1998 and continue until the position is filled. Affirmative Action/Equal Employment Opportunity

ASSOCIATE PROFESSOR. 85591T, 14, Department of Anatomy and Reproductive Biology, University of Hawaii at Manoa, John A. Burns School of Medicine, extramural funds, full-time, 11-month, temporary, nontenurable, annually renewable depending on performance and funding availability, to begin approximately November 1998. Duties: participate in an active research group that investigates basic biology of animal cloning and its application to veterinary and human medicine (cell and tissue therapy); teach courses, seminars, and/or sections of independent study, as assigned. Minimum qualifica-tions: Ph.D. or D.V.M. in anatomy or other biomedical science. Also included, but not limited to, at least four years at the rank of Assistant Professor or equivalent; evidence of proficiency in teaching; scholarly achievement, publications, and competence as judged by peers active in the same field at major research universities. Desirable qualifications: evidence of ability to apply skills and knowledge in cell biology, molecular biology, genet ics, embryology, and reproductive biology; two years of experience in micromanipulation of animal gametes/zygotes/preimplantation embryos leading to successful mammalian cloning. Minimum annual salary: \$51,264. To apply: submit letter of application, curriculum vitae, names of three references to: Dr. Scott Lozanoff, Chairman, Department of Anatomy and Reproductive Bi-ology, University of Hawaii School of Medicine, 1960 East-West Road, Room T-311, Honolulu, HI 96822. Closing date: all application materials must be received by October 12, 1998. An Equal Employment Opportunity/.Affirmative .Action Institution.

NEUROPHYSIOLOGIST

The Department of Biology at the University of Central Florida invites applications for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PRO-FESSOR level with expected starting date of August 1999. We are specifically interested in an individual using optical and computational techniques in neurophysiolo gy. A Ph.D. and a minimum of five years of postdoctoral experience are required. The successful candidate is expected to develop an interdisciplinary research program that can attract extramural funding, direct graduate teach ing research, and participate in undergraduate and graduate teaching in physiology. Candidates should submit a curriculum vitae, names of three references, and statements of research and teaching interests by October 16, 1998. Candidate screening will commence as completed applications are received. Send material to: David T. Kuhn, Search Committee Chair, Department of Biology, University of Central Florida, 4000 Central Florida Boulevard, Orlando, FL 32816-2368. The University of Central Florida is an Équal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply As an agency of the State of Florida, all application materials (including transcripts) and selection procedures are available for public review

POSITIONS OPEN

GENETICIST

The Department of Biology, Bryn Mawr College invites applications for tenure-track position at the level of ASSISTANT PROFESSOR beginning fall 1999. We are searching for a broadly trained Geneticist whose research uses modern molecular biological techniques and intersects with one or more of the following fields already represented in the department and elsewhere on campus: cell and developmental biology, neural and behavioral sciences, ecology, and environmental sciences. Teaching responsibilities will include a course in classical and molecular genetics with laboratory, participation in the teamcourse in a specialty area. Development of an active research program involving undergraduate and graduate students is expected. The successful candidate is expected to demonstrate a strong commitment to combining teaching and research activities. A Ph.D. is required and postdoctoral research experience is desirable

Application deadline is November 6, 1998. Send application including curriculum vitae, a statement of teaching and research interests, names and addresses of at least three professional references, and copies of key publications and/or preprints to: Margaret Hollyday, Department of Biology, Bryn Mawr College, 101 North Merion Avenue, Bryn Mawr, PA 19010-2899. For more information, visit our website: http://bascom brynmawr.edu/Acads/Biology/. Bryn Maur College is an Equal Opportunity/Affirmative Action Employer. We encourage applications from individuals interested in

joining a multicultural and international academic community. Minority candidates and women are especially encouraged to apply.

ASSISTANT PROFESSOR OF PHARMACOLOGY DIVISION OF BASIC PHARMACEUTICAL SCIENCES

Northeast Louisiana University

Due to a recent resignation, applications are invited for a 12-month, tenure-track position in the Division of Basic Pharmaceutical Sciences. The Division has 14 FTEs and comprises the areas of medicinal chemistry, pharmacology, and pharmaceutics. The successful candidate will be expected to establish an active research program and be committed to excellence in teaching at the undergraduate and graduate levels. The position requires a Ph.D. in pharmacology. The area of research is open but should complement the existing research of Division faculty. Candidates with postdoctoral experience and a background in phar-macy education are preferred. To be considered for this position, applicants should submit, by September 30, 1998, a curriculum vitae, a brief description of research and teaching interests, and the names, addresses, and telephone numbers of three references to: Michael Crider, Ph.D., Director, Division of Basic Pharmaceutical Sciences, School of Pharmacy, Northeast Louisiana University, Monroe, LA 71209-0470. Telephone: 318-342-1707; e-mail: pycrider@alpha.nlu.edu.

A Member of the University of Louisiana System.

Northeast Louisiana University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR MOLECULAR GENETICS

Applications are invited for a tenure-track position in human biology at the University of Wisconsin–Green Bay for fall of 1999. Teaching responsibilities include genetics, genetics laboratory, and Biology I for majors. Candidates should have completed a Ph.D. (or equivalent) by August 1999 in genetics, molecular biology, or a related field. The successful candidate should be broadly educated in biology and have a commitment to undergraduate teaching excellence in an interdisciplinary program. This includes a commitment to directing undergraduate research. Preference will be given to candidates with teaching and postdoctoral experience. First screen November 1, 1998; position open until filled. To apply send (1) letter of application, (2) curriculum vitae, (3) statement on teaching and research philosophy, (4) copies of undergraduate and graduate transcripts, and (5) three current letters of reference to: Dr. Warren Johnson, University of Wisconsin-Green Bay, 2420 Nicolet Drive, Green Bay, WI 54311-7001, Telephone: 920-465-2275; FAX: 920-465-2769. Further information available at website: http://www.uwgb.edu/~humbio/. UWGB is an Affirmative Action/Equal Opportunity Employer. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.



Roche

Biotechnology

Your expertise belongs at our Center of Excellence.

Take biotechnology and your career in a new direction at Roche Vitamins Inc., an industry leader for human and animal health and nutrition. At the new home of our global Center of Excellence in Biotechnology in Nutley, NJ, we are developing new products and processes in a range of areas including vitamins, carotenoids, food ingredients, enzymes, and medicated feed additives.

Right now, we have outstanding opportunities for experienced research leaders to lend their expertise to the study of Carotenoid/Vitamin Metabolic Engineering and to Project Administration.

Scientific Leader - Metabolic Engineering

Lead a cross-functional scientific team in conceiving, planning and implementing scientific investigations in carotenoid/vitamin metabolic engineering, utilizing bacteria, fungi, and plants. You will provide direction and expertise, communicate with, and make recommendations to management, prepare and present proposals and manuscripts, and ensure quality of the work. Successful candidate will have a PhD with expertise in metabolic engineering (Biochemistry, Microbiology, Molecular Biology) and a minimum of 8 years experience that includes leadership background. Demonstrated ability to manage multiple global projects of groups or individuals in a productive manner in order to ensure the achievement of business goals is necessary. Dept. SL-ME.

Associate Scientific Leader - Project Administration

Review and control international budgetary funds and provide for timely evaluation and administration of project funding. In this position, you will coordinate administrative activities relevant to research projects, review status of projects, and provide budgetary and timeline reports to the Director. Additionally, you will coordinate projects purchasing needs, assist in conducting database searches, implement/administer all programs, symposia and meetings. The successful candidate will have a PhD or Master's degree with 3-5 years of relevant experience in a Biology or Biochemistry discipline with proven expertise in financial operations planning and management (Master's degree in business or management preferred). Working knowledge of computer database and excellent communication/management skills are required. Working competency in German and international research business background are highly desirable. **Dept. SL-PA**.

At Roche Vitamins Inc., we not only offer our employees competitive salaries and comprehensive benefits, but we also offer a unique campus-like facility, state-of-the-art fitness center, and on-site childcare.

For consideration, forward your resume, indicating position of interest, salary requirements, and Dept. code, to: Roche Vitamins Inc., Human Resources Department, 45 Waterview Boulevard, Parsippany, NJ 07054-1298. Principals only. We appreciate your interest in Roche Vitamins Inc., but can only respond to qualified candidates. Roche Vitamins Inc., is an equal opportunity employer fully committed to diversity in the workplace.

POSITIONS OPEN

MEDICAL UNIVERSITY OF SOUTH CAROLINA DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

ASSISTANT or **ASSOCIATE PROFESSOR**. Two faculty positions will be filled by individuals with expertise in one of the following areas:

(1) Molecular pathogenesis: focus on prokaryotic or viral-mediated inflammation as it relates to autoimmune, atherosclerotic, and/or type I diabetic vasculopathy.

(2) Molecular immunology: focus on immune modulation and vaccine development for cancer and/or autoimmune disease.

(3) Molecular virology: focus on HIV pathogenesis, vaccine development, and/or lentiviral vector development.

(4) Molecular biology: focus on development of gene delivery systems (viral or otherwise) for treatment of cancer or other genetic disease.

Advanced degree and evidence of scholarly activity is required. Extramural funding required at the Associate Professor level.

Send curriculum vitae and names of four references to: James S. Norris, Professor and Vice Chairman, c/o Janie Nelson, Department of Microbiology and Immunology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29407.

Additional information about the Medical University can be found on the University website: http://www. musc.edu. Women and minorities are strongly encouraged apply. The Medical University of South Carolina, Charleston, SC 29425 is an Equal Opportunity/Affinative Action Employer.

Faculty positions in environmental science and interdisciplinary science. The Department of Biological and Phys-ical Sciences at Kennesaw State University (KSU) seeks to fill two tenure-track faculty positions beginning August 1999. (1) ASSISTANT PROFESSOR with a background in terrestrial plant ecology or plant systematics and an interest in environmental monitoring of watersheds (Doctoral degree in an appropriate specialty area required). Teaching responsibilities: courses in specialty area and an interdisciplinary science course. A demonstrated ability to generate extramural funding is de-sired. (2) **INSTRUCTOR/ASSISTANT PROFES-SOR** with primary responsibility to an interdisciplinary science sequence taken by all non-science majors (minimum of a Master's degree in an appropriate scientific discipline required). A demonstrated ability to develop multimedia educational materials is desired. To guarantee consideration, applications must be received by October 15, 1998, but will be accepted until the positions are filled. Application must include a letter specifying the position sought and describing the applicant's qualifications, teaching philosophy, and research interests (for the plant position); current curriculum vitae; graduate transcripts: and the names, addresses, and telephone numbers of three references. Send to: Dr. R. C. Paul, Department of Biological and Physical Sciences, Kennesaw State University, 1000 Chastain Road, Kennesaw, GA 30144-5591. Telephone: 770-423-6158. Visit KSU's home page at website: www.kennesaw.edu.

KSU is an Affirmative Action/Equal Opportunity Employer with a notable record for the inclusion of minorities and women in its educational mission and strongly encourages applications from both groups.

EUKARYOTIC CELL BIOLOGIST ASSISTANT PROFESSOR

The Department of Biological Sciences at Mary Washington College is seeking a Eukaryotic Cell Biologist who has research experience with molecular biology techniques for a tenure-track appointment at the Assistant Professor level. Applicants are required to have a Ph.D. or equivalent terminal degree and must be committed to excellence in teaching. Course responsibilities will include cell biology, genetics, molecular biology, and general biology. Mary Washington College is a liberal arts and sciences

Mary Washington College is a liberal arts and sciences college located 50 miles south of Washington, D.C. Interested persons must submit a curriculum vitae, transcripts, and brief statement of teaching philosophy and research goals and must arrange to have three letters of reference sent directly to: Biology Search, Mary Washington Gollege, 1301 College Avenue, Box 615, Fredericksburg, VA 22401-5358. Deadline for receipt of applications is October 23, 1998, by 5 p.m. Postmarks will not be honored. Visit the College's website: www. mwc.edu. Mary Washington College is deeply committed to Affirmative Action and encourages minorities and women to apply.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR. Soil Fertility/Integrated Nutrient Management Specialist, 12-month, tenure-track position with a 70 percent research/30 percent extension appointment. Responsibilities include statewide leadership for development and adoption of integrated nutrient management practices that increase profitability and protect environmental quality in Nebraska's cropping systems. Understanding process controls on soil nutrient dynamics, plant uptake and nutrient requirements, and longer-term effects of nutrient management on soil fertility and soil quality are crucial components of the research program. Extension responsibilities include coordination of outreach programs on nutrient management and contributing to team efforts on integrated crop management. Requires a Ph.D. in soil science, agronomy, or a related discipline, ability to publish original research, excellent oral and written communication skills, and ability to supervise graduate student thesis research. A letter of application, résumé, and tran-scripts must be received by October 30, 1998, for the first round of selection. Arrange to have three letters of reference sent by that date. Search will continue until a suitable candidate is identified or the search is closed. Apply to: Dr. Kenneth G. Cassman, Head, Agronomy, Univer-sity of Nebraska-Lincoln, P.O. Box 830915, Lincoln, NE 68583-0915. E-mail: agro107@unlvm.unl.edu. UNL is committed to a pluralistic campus community through Affirmative Action/Equal Opportunity, is responsive to the needs of dual career couples, and assures reasonable accommodation under the Americans With Disabilities Act. Contact: Dr. Cassman, Telephone: 402-472-1555 for additional information.

The Division of Environmental Science and Engineering (ESE) at the Colorado School of Mines (CSM) invites applications for a full-time, tenure-track ASSISTANT or ASSOCIATE PROFESSOR level beginning August 1999. Applicants must possess an earned doctorate in microbiology, environmental engineering, molecular biology, or related field by date of appointment; expertise in applied environmental microbiology; and experience with current molecular methods. The successful applicants will be expected to establish an independent, nationally recognized research program supported by extramural funds, and to teach effectively in ESE's graduate degree and undergraduate minor programs. Candidates should have a strong interest in collaborating with a group of Environmental Engineers and scientists whose primary focus is in the identification and solution of problems related to environmental contamination.

Applicants should submit a current curriculum vitae, letter of application, and the names, addresses, and telephone numbers of at least three references to: Colorado School of Mines, Office of Human Resources, Environmental Science and Engineering Faculty Position, Search #98-111330, 1500 Illinois Street, Golden, CO 80401. FAX: 303-384-2025.

Review of applications will begin on November 3, 1998, and will continue until the position is filled. Additional information about CSM and ESE is available at website: http://magma.mines.edu/academic/envsci.

CSM is an Equal Employment Opportunity/Affirmative Action Employer. It encourages applications from women, minorities, veterans, and people with disability.

ASSISTANT PROFESSOR. 85590T, 13, Department of Anatomy and Reproductive Biology, University of Hawaii at Manoa, John A. Burns School of Medicine, extramural funds, full-time, 11-month, temporary, non-tenurable, annually renewable depending on performance and funding availability, to begin approximately November 1998. Duties: participate in an active research group that investigates basic biology of animal cloning and its application to veterinary and human medicine (cell and tissue therapy); teach courses, seminars, and/or sections of independent study, as assigned. Minimum qualifica-tions: Ph.D. or D.V.M. in anatomy or other biomedical science; at least two years of postdoctoral experience and publications, and demonstrated ability to teach. Desirable qualifications: evidence of ability to apply skills and knowledge in cell biology, molecular biology, genetics, embryology, and reproductive biology, experience in micromanipulation of animal gametes/zygotes/preimplantation embryos. Minimum annual salary: \$40,524. To apply: submit letter of application, curriculum vitae, names of three references to: **Dr. Scott Lozanoff, Chair**man, Department of Anatomy and Reproductive Bi-ology, University of Hawaii School of Medicine, 1960 East-West Road, Room T-311, Honolulu, HI 96822. Closing date: all application materials must be received by October 12, 1998. An Equal Employment Opportunity/Affirmative Action Institution.

POSITIONS OPEN

CELL/MOLECULAR BIOLOGIST

The Biology Department at Santa Clara University invites applications for a Cell/Molecular Biologist to fill a tenure-track position at the **ASSISTANT PROFES-SOR** level beginning September 1999. Applicants whose expertise includes a molecular approach to cell physiology, immunology/virology, developmental biology, or neurobiology/animal physiology are especially encouraged to apply. A Ph.D., postdoctoral experience, and demonstrated teaching ability are required. Teaching responsibilities include lower and upper-division lecture and laboratory courses for majors and non-majors. The successful candidate will be expected to develop a strong research program that includes undergraduate participation.

Applicants should submit a (1) curriculum vitae, (2) statement of current and future research plans, (3) statement of teaching experience, and (4) three letters of recommendation to: Chair, Cell/Molecular Biologist Search Committee, Biology Department, Santa Clara University, Santa Clara, CA 95053. The dead-line for application is November 1, 1998. Santa Clara University, a Jesuit Institution, is an Equal Opportunity/Affirmative Action Employer and welcomes applications from women, persons of color, and members of other historically underrepresented U.S. ethnic groups.

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The Department of Chemistry at the University of North Carolina at Chapel Hill invites applications for a tenure-track position in biological chemistry. The successful applicant must have a Ph.D., postdoctoral experience, a strong record of research, and the ability to teach biological chemistry effectively at the undergraduate and graduate levels. Preference will be given to individuals who can establish a strong research program in biological chemistry, interact enthusiastically with other Chemists, and whose appointment would be at the rank of AS-SISTANT PROFESSOR. Review of the applications will begin October 21, 1998. Send a curriculum vitae, a brief research plan, a statement of teaching interests, and four letters of recommendation to: Biological Search Committee, Department of Chemistry, CB# 3290, University of North Carolina, Chapel Hill, NC 27599-3290. The University of North Carolina is an Equal Opportunity/Affinative Action Employer.

FACULTY POSITIONS IN CELLULAR AND MOLECULAR IMMUNOLOGY AT COLUMBIA UNIVERSITY College of Physicians and Surgeons

The Departments of Biochemistry, Medicine, Microbiology, and Pathology at Columbia University College of Physicians and Surgeons invite applications from outstanding individuals in the fields of cellular or molecular immunology. Several faculty positions are available, and appointments can be either tenure-track or tenured, and at ANY RANK, depending on the qualifications and experience of the applicant. Please send a letter of interest, statement of research interests, current curriculum vitae, and names of three references to: Dr. Kathryn Calame, Chair, Immunology Search Committee, Department of Microbiology, Columbia University, 701 West 168th Street, New York, NY 10032. Applications are requested by January 1, 1999.

Columbia University is an Affirmative Action/Equal Opportunity Employer.

VERTEBRATE NEUROENDOCRINOLOGY UNIVERSITY OF COLORADO AT BOULDER

The Department of Environmental, Population, and Organismic Biology (EPOB) invites applications for a tenure-track position at the ASSISTANT PROFES-SOR level in vertebrate neuroendocrinology. Preference given to applicants using contemporary neuroendocrine approaches to study questions in comparative biology (e.g., reproduction, development, behavior, stress, or homeostatic processes). Teaching includes a human anatomy lecture course. Submit curriculum vitae, names and addresses of four referees, and statements of research and teaching interests to: Dr. Robert Lynch, Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder, CO 80309-0334. Application receipt by November 18, 1998. The University of Colorado at Boulder is committed to diversity and equality in education and employment. National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)



National Institutes of Health Public Health Service Bethesda, Maryland

The Laboratory of Physical Biology, NIAMS has **POSTDOCTORAL POSITIONS** available to participate in projects focused on the biochemistry, cellular organization, and anchoring function of the novel myotendon junction protein N-RAP (Luo et a. Cell Motil Cytoskeleton 38:75-90, 1997). Candidates should have expertise in basic cell and molecular biological methods, such as expression and purification of recombinant proteins, protein binding assays, and immunofluorescence, and must have a Ph.D. and/or MD degree with less than five years of postdoctoral experience. Successful applicants will have the opportunity for extensive interactions with other members of the Laboratory of Physical Biology. To apply, send a curriculum vitae and have three letters of recommendation sent to:

Dr. Robert Horowits NIAMS, National Institutes of Health Building 6, Room 408 6 CENTER DR MSC 2751 BETHESDA, MD 20892-2751 e-mail: horowits@helix.nih.gov

NIH is an Equal Opportunity Employer

GLOBAL OPPORTUNITIES

Sultan Qaboos University – Sultanate of Oman COLLEGE OF ENGINEERING

Sultan Qaboos University, the National University of the Sultanate of Oman, invites applications for Head of Department (Full or Associate Professor), Mechanical Engineering, College of Engineering.

It is expected that the incumbent will provide leadership for the overall organization and administration of teaching, research, and service activities of the Department. The successful candidate will be required to develop, improve, and stimulate academic programmes in the Department, and to provide leadership, active participation in curriculum development, and inspiration to the staff and students to pursue high standards of learning and scholarship. The incumbent is responsible for the selection, training, assignment, and evaluation of personnel; planning and budgeting for facilities and equipment; recommending the hiring, promotion, termination, and discipline of the staff; liaison with relevant departments in the University and government agencies and private sectors; exploiting extramural support and collaborative research; and implementing research projects and disseminating research funding.

Applicants should possess a Ph.D. degree in Mechanical / Thermofluids Manufacturing /Industrial Engineering from a reputable university, with professional credentials of a high order, sufficient to meet the criteria for full or associate professorship. Proficiency in spoken and written English is required. Candidates with at least 10 years of experience in a full-time appointment on the academic staff of a recognized and reputable academic institution, who have demonstrated a professional and potential for leadership, are desirable.

Apart from a very attractive tax-free base salary, the University offers free furnished accommodations, two years renewable employment contract with end-of-service gratuity, annual leave with return air tickets, free medical treatment in Government Hospitals in the Sultanate, an educational allowance for two eligible children.

Applicants should send their Curriculum Vitae with the names of two references, quoting our Reference ADV/ENG/05/98, to:

The Director, Personnel Affairs Sultan Qaboos University P.O. Box 50, Al-Khod-123 Sultanate of Oman E-mail: personel@squ.edu.om



Winthrop-University Hospital, a 591-bed acute care teaching hospital, affiliated with the State University of New York at Stony Brook School of Medicine, invites nominations and applications for the position of Director of the Cardiopulmonary Research Institute.

The successful candidate will be expected to promote an environment that fosters excellence in basic and clinical research. Candidates should have earned doctorate (M.D., Ph. D., or equivalent), advocacy abilities, strong personnel management skills, and recognized by peers for outstanding contribution to the medical science of lung and heart.

We offer a competetive salary and a flexible benefits program. For consideration, please send your curriculum vitae, statement of research activities and research plans, and names/addresses of three references, to: Department of Human Resources, Winthrop-University Hospital, 259 First Street, Mineola, NY 11501. Visit us at http://www.careermosaic.com/cm/winthrop. EOE M/F/D/V.



GLOBAL OPPORTUNITIES

Sultan Qaboos University – Sultanate of Oman COLLEGE OF AGRICULTURE Position Announcement Head of Fisheries Science and Technology Department

Sultan Qaboos University, the National University of the Sultanate of Oman, invites applications for Head of Department (Full or Associate Professor), Fisheries Science and Technology Department, College of Agriculture.

The incumbent will provide leadership for the overall organization and administration of teaching, research, and service activities of the Department. The successful candidate is expected to develop, improve, promote, and stimulate quality and relevant academic programmes in the Department, and to provide leadership, active participation in curriculum development and inspiration to the staff and students to pursue high standards of learning and scholarship. The incumbent is responsible for the selection, training, assignment, and evaluation of personnel; planning and budgeting for facilities and equipment; recommending the hiring, promotion, termination, and discipline of the staff; liaison with relevant departments in the University and government agencies and private sectors; exploiting extramural support and collaborative research; and implementing research projects and disseminating research fundings.

Applicants should possess a Ph.D. degree in marine biology, fisheries science, marine aquaculture, oceanography, marine ecology, or related disciplines from a reputable university, with professional credentials of a high order, sufficient to meet the criteria for full or associate professorship. Proficiency in spoken and written English is required. Candidates with at least 10 years of experience in a full-time appointment on the academic staff of a recognized and reputable academic institution, who have demonstrated the professional growth and potential for leadership. are desirable.

Apart from a very attractive tax-free base salary, the University offers free furnished accommodations, two years renewable employment contract with end-of-service gratuity, annual leave with return air tickets, free medical treatment in Government Hospitals. Interested candidates are requested to submit a letter of application and

full C.V., quoting our Ref: ADV/AGRI/10/98, to:

The Director, Personnel Affairs, Sultan Qaboos University P.O. Box 50, Al-Khod – 123, Sultanate of Oman E-mail: personel@squ.edu.om

POSITIONS OPEN

MICROBIOLOGIST

The Biology Department of Albion College seeks a full-time, tenure-track Microbiologist to begin August 1999. A Ph.D. is required, and teaching experience is preferred. The successful candidate will be expected to teach an upper-level, undergraduate course in microbiology that includes environmental and medical perspectives. A second upper-level offering will focus on a topic such as environmental microbiology, immunology, or microbial evolution, depending on the successful candi-date's particular area of expertise. The candidate will also share responsibilities in introductory biology courses. A research program incorporating undergraduate students is expected. Facilities include standard molecular biology equipment (including thermal cycler, DNA sequencing apparatus, and ultra-low freezer), TEM and SEM, and a 135-acre nature center. Further information is available at website: http://www.albion.edu/fac/biol. Send letter of application, including teaching philosophy and research interests, current curriculum vitae, graduate and undergraduate transcripts, and three letters of reference to: Dr. Ruth E. Schmitter, Chair, Biology Department, Albion College, Albion, MI 49224. Deadline for applications is October 15, 1998. Albion College is an Equal Opportunity Employer. Albíon College encourages applications from women and minority candidates.

Two positions in cell biology. The School of Biological Sciences of the University of Texas at Austin invites applications for two tenure-track faculty positions in cell biology. Appointments will be in the newly formed Section of Molecular, Cell, and Developmental Biology at the level of ASSISTANT PROFESSOR, although unusually well-qualified individuals may be considered at a more senior level. We seek to hire at least one individual working on signal transduction, but all areas of eukaryotic cell biology will be considered. Applicants must have a Ph.D. or similar degree. The successful candidate will be expected to establish an active research program, and to teach at both graduate and undergraduate levels. To apply, send a curriculum vitae, a research statement, and representative reprints, and have three letters of recommendation sent to: Dr. Klaus Kalthoff, Cell Biology Search Committee, Department of Zoology, University of Texas, Austin, TX 78712. Include telephone numbers and email addresses of recommenders in the application. Applications should be received by October 16, 1998. The University of Texas at Austin is an Équal Opportunity / Affirmative Action Employer.

The Department of Chemistry at The University of Virginia is seeking qualified applicants for two tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level. We are seeking individuals whose research interests and expertise are in one of the following areas: biological chemistry, material science/synthetic chemistry, and theoretical/physical chemistry. Candidates are 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. Applicants should send a curriculum vitae. copies of reprints/preprints, and a detailed description of research plans no later than November 1, 1998, to: Professor Timothy Macdonald, Chair, Department of Chemistry, University of Virginia, McCormick Road, Charlottesville, VA 22901. Applicants should arrange for three letters of recommendation to be sent to the above address by the closing date. The University of Virginia is an Equal Opportunity/Affirmative Action Employer

Brooklyn College/City University of New York invites applications for a tenure-track position at the ASSIS-TANT PROFESSOR level in the Department of Biology beginning September 1999. We seek a broadly trained Physiologist who uses cell and molecular biology approaches. Preference will be given applicants with a strong background in biology of invertebrates. The faculty member is required to develop a research program that generates external funding and trains undergraduate and graduate research students. Applicants must have a Ph.D. degree, postdoctoral training, publications, and a strong commitment to undergraduate education. A complete application consists of curriculum vitae, statement of research plans, and three letters of recommendation (to be sent directly from three referees). Review of applications will begin on October 15, 1998, and continue until position is filled. Apply to: Dr. Joan Rome, Office of Personnel Services, Brooklyn College, 2900 Bedford Avenue, Brooklyn, NY 11210. An Affimative Action/Equal Employment Opportunity/IRCA/ADA Employer.

POSITIONS OPEN

DIRECTOR, U.S. MARINE SHRIMP FARMING PROGRAM/SENIOR RESEARCH SCIENTIST AND CONSULTANT

Responsibilities include administrative, technical, and financial oversight of a national multi-institutional research program, interfacing with federal agencies, preparing and submitting integrated implementation plans and progress reports, fostering interaction and cooperation among institutions and the commercial sector, coordination of technical workshops, and development of research goals and priorities (half-time).

The successful candidate will also perform research, product development, and technical consultation in one of the following areas: microbial dynamics, biosecurity; stock enhancement; fish maturation and reproduction; biochemical engineering; disease diagnosis, prevention, and control; ecosystem productivity and stability; growth enhancement, breeding and genetics, or mathematical modeling; as well as promote new business and research initiatives (half-time).

Qualifications: Ph.D., with 10 years of experience in research and program management. Employer:

The Oceanic Institute

Attn: Human Resources Department 41-202 Kalanianaole Highway Oahu, HI 96795 E-mail: oi@lava.net

Salary: commensurate with experience and ability. Qualified applicants should forward their résumés to the above address or by e-mail.

NEUROBIOLOGY UNIVERSITY OF PITTSBURGH

The Department of Neurobiology, University of Pittsburgh School of Medicine, is inviting applications for a **TENURE-TRACK** position at **ALL RANKS.** Preference will be given to applicants investigating the molecular and genetics basis of neurodegenerative diseases and cell death. It is expected that the successful candidate will conduct a competitive, independent research program that will complement current department strengths in cellular, developmental, and systems neurobiology. The position requires a Ph.D. and/or M.D. with at least two years of postdoctoral experience. Competitive salary support and start-up funds will be made available. Applicants should submit by December 1, 1998, a curriculum vitae, a detailed description of present and future research goals, representative recent publications, and names and addresses of three references to: Dr. Pat Levitt, Chair, Neurodegeneration Search, Department of Neurobiology, University of Pittsburgh School of Medicine, E1446 Biomedical Science Tower, Pittsburgh, PA 15261.

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

TEACHING FACULTY POSITION

The University of Chicago invites applications for a non-tenure-track position as **SENIOR LECTURER**/ **LECTURER** in the Biological Sciences Collegiate Division. The applicant will teach introductory biology courses and will develop/supervise laboratory programs for undergraduate upper-level courses in organismal biology, biomechanics, physiology, and neurobiology. All courses will be taught in the state-of-the-art Biological Sciences Learning Center. We are seeking Ph.D. applicants with teaching and research experience in these fields. Send curriculum vitae, three letters of reference, and a statement of teaching interest by October 15, 1998, to: José Quintans, The University of Chicago, Biological Sciences Learning Center, Room 104-C, 924 East 57th Street, Chicago, IL 60637.

The Division of Infectious Diseases, Department of Medicine at Emory University School of Medicine invites applicants for a faculty position at the ASSISTANT **PROFESSOR** level. The Division is seeking a full-time **MALARIOLOGIST** with a special interest in vaccine development. Applicants should have a Ph.D. or M.D. degree with a strong background in malaria and other parasitic diseases research. Candidates are expected to have an active research program in basic science. Salary will be commensurate with experience. Send curriculum vitae and letter of interest to: **Dr. David Stephens**, **Division Director, Infectious Diseases, Grady Memorial Hospital, 69 Butler Street, Atlanta, GA 30303**. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

NEUROBIOLOGY UNIVERSITY OF PITTSBURGH

The Department of Neurobiology, University of Pittsburgh School of Medicine, is inviting applications for a **TENURE-TRACK** position at **ALL RANKS**. Preference will be given to applicants investigating synaptic function or plasticity utilizing molecular and/or biophysical approaches. It is expected that the successful candidate will conduct a competitive, independent research program that will complement current department strengths in cellular, developmental, and systems neurobiology. The position requires a Ph.D. and/or M.D. with at least two years of postdoctoral experience. Competitive salary support and start-up funds will be made available. Applicants should submit by December 1, 1998, a curriculum vitae, a detailed description of present and future research goals, representative recent publications, and names and addresses of three references to: **Dr. Pat Levitt, Chair, Synaptic Function Search, Department of Neurobiology, University of Pittsburgh School of Medicine, E1446 Biomedical Science Tower, Pittsburgh, PA 15261.**

The University of Pittsburgh is an Equal Opportunity Employer.

ICHTHYOLOGIST/CURATOR

The Florida Museum of Natural History, at the University of Florida, invites applications for a tenure-track position as **ASSISTANT CURATOR** in ichthyology. The successful candidate is expected to develop an active research program in ichthyology using current systematic tools and to curate and develop the museum's collection of fishes. The candidate must have a strong commitment to university education and is expected to interact in allied academic departments. Minimum qualifications: Ph.D. and strong research and collections interests in systematic ichthyology. Starting date 11 August 1999. Salary competitive and commensurate with experience. Please send a letter of application, curriculum vitae, a statement of research, collections, and teaching experience, reprints of three selected publications, and arrange for three letters of recommendation, by 15 November 1998, to: Dr. David W. Steadman, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. The selection process will be conducted under the provisions of Florida's "Government in the Sunshine" and Public Records laws. The University of Florida is an Equal Opportunity/Affirmative Action Employer

The University of Texas at Tyler Department of Biology seeks qualified applicants for a tenure-track position at the level of **ASSISTANT PROFESSOR**. The successful candidate will have a recent record of outstanding teaching in general biology lectures and laboratories and evidence of potential to develop a strong research program that will involve both undergraduates and Master's-level graduate students. Applications will be reviewed starting October 15, 1998. Position will start fall semester 1999. A letter of application, statement of teaching philosophy, summary of research interests, curriculum vitae, and names, telephone numbers, and addresses of three references should be sent to: Search Committee, Dr. Neil Ford, Department of Biology, The University of Texas at Tyler, 3900 University Boulevard, Tyler, TX 75799. An Equal Opportunity/Affinnative Action Employer.

THREE FULL-TIME POSITIONS AT CLEVELAND CHIROPRACTIC COLLEGE LOS ANGELES CAMPUS

FACULTY/ADMINISTRATOR. Ph.D. in biological sciences. CHAIR of the Department of Physical and Life Sciences. Ph.D. in human biology, human physiology, or human anatomy. Some evenings and weekends required. DIRECTOR of Faculty Scholarship and Scientific Research. Ph.D. in human biology, human physiology, or human anatomy. Salary and benefits will be competitive and commensurate with education and experience. Please FAX résuntés to: FAX: 253-945-6465.

RESEARCH SCIENTISTS

Positions are available for talented MOLECULAR BIOLOGISTS with Ph.D's to identify new targets for novel antibacterial or antifungal agents. Because these Research Scientists will be key members of a rapidly growing biotechnology company, we seek candidates who will be capable of developing with the company into positions with increasing responsibilities. Please send résumé to: Dr. Judith W. Zyskind, RajyaBiotics, 8415 La Jolla Scenic Drive North, La Jolla, CA 92037.

GLOBAL OPPORTUNITIES

SCIENTIFIC PROGRAM MANAGER

National Multiple Sclerosis Society is seeking a Scientific Program Mgr. to assist in the administration of research and training programs. Will help determine program priorities, funding levels, prepare analyses of research results, and coordinate committee activities.

Ph.D., MD or equivalent professional degree in biomedical science plus post-doctoral research experience. Excellent written, verbal and interpersonal skills are essential.

Please fax/mail your resume with salary history & requirements to:

National Multiple Sclerosis Society Attn: Human Resource Dept. 733 Third Ave. New York, NY 10017-3288 Fax: (212) 476-0535 EOE M/F/D/V.

NATIONAL MULTIPLE SCLEROSIS SOCIETY

LeukoSite, Inc., located in the Kendall Square area of Cambridge, MA, is a leader in inflammation research and the development of novel therapeutics for the selective immunosuppression of chronic inflammatory diseases. We have collaborations with major pharmaceutical companies, as well as leading academic labs in the US and Europe.

SENIOR SCIENTIST

We are seeking a Senior Scientist to join our G Protein-Coupled Receptor (GPCR) Biology Group. You will join an active effort in studying the molecular and cellular functions of chemokine receptors and other related GPCRs, in identifying ligand for orphan GPCR, and/or in investigating signal transduction cascade mediated by these molecules. Successful candidates should have a Ph.D. plus several years' postdoctural experience and a demonstrated record of independent and creative research in molecular biology or cellular immunology, preferably in the area of G protein-coupled receptors. Job Code: LW

Please send your CV (referencing job code) with cover letter, plus the names of three references to: Employee Services, LeukoSite, Inc., 215 First Street, Cambridge, MA

02142. An Equal Opportunity Employer. See our website at: www.leukosite.com.

CENTRAL DRUG RESEARCH INSTITUTE, LUCKNOW (INDIA) ADVERTISMENT NO. 2/98

POSITIONS FOR BIOMEDICAL SCIENTISTS

Central Drug Research Institute is a premier Research Institute of the Council of Scientific & Industrial Research devoted to new Drug Research and Development in India. Besides synthesis and screening of biologically active compounds, the Institute has high thrust on the basic research related to new drug development. To further strengthen the latter activity, the Institute is now looking for active researchers of Indian origin who are desirous to take up their research career in India in the areas of Molecular Pharmacology, Molecular Endocrinology, Molecular Parasitology, Genomics, Combinatorial Chemistry, Bioinformatics, and Molecular & Cellular Immunology of parasitic diseases.

ESSENTIAL QUALIFICATIONS

The candidates for above positions should possess Ph.D. degree in any of the above areas and should have at least one year postdoctoral experience as proven by good quality publications in reputed International Journals. Ph.D. holders having more than 4 years research experience may be considered for higher post.

JOB SPECIFICATIONS

These are independent group leader–level positions where the selected candidates are expected to initiate new line of research related to New Drug Development in any of the above areas.

REMUNERATION

The candidates may be considered either for the post of Scientist 'C' (Pay scale Rs.10,000-325-15,200) or Scientists E-I (Rs.12,000-375-16,500) depending on the quality of publications and their technical/scientific background. At the minimum of the present pay scales, the total emoluments for Scientist 'C' and Scientist 'E-I' are Rs.14,140/= and Rs.16,760/= P.M. respectively. Limited official accommodation is also available. The candidates must clearly indicate their age, which should not exceed 35 years for Scientist 'C' and 40 years for Scientist 'E-I' as on Ist September 1998, relaxable by 5 years for SC/ST/ Physically handicapped and 3 years for OBC candidates.

APPLICATION

Candidates residing abroad must send their detailed Bio-data providing all the required information with copy of their outstanding publications and names of three referees immediately, which should reach CDRI on or before 15th December 1998. Candidates working in India may refer Employment News of 13th June, 1998 issue for details. All the applications should be addressed to the *Director, Central Drug Research Institute, Chattar Manzil Palace, Post Box No. 173, Lucknow - 226 001 (U.P.) India.*

The candidates who had already applied against our earlier advertisement need not apply again.

If any of the candidates is not found suitable for the post applied for by him/her, he/she may be considered for a lower post.

POSITIONS OPEN

RESEARCH ASSOCIATE STANFORD UNIVERSITY SCHOOL OF MEDICINE Department of Pathology

Applications are invited for a position available July 1, 1999, to investigate the molecular pathogenesis of hematopoietic malignancies. The successful applicant will join an active multidisciplinary research group studying the basic and clinical aspects of lymphomas and leukemias through the use of DNA microarray technologies to quantitate differences in gene expression in human tumors as well as animal and *in vino* models. The position requires application and supervision of efforts to create customized DNA microarrays, microdissection of tissue samples for analysis, and interpretation and correlation of results with histopathologic features, clinical diagnosis, and treatment outcome.

Candidates must have a M.D. and/or Ph.D. and a background in biochemistry or molecular biology. An understanding of human disease pathogenesis and diagnostic skills in histopathology are essential. Familiarity with the application of microarray techniques is required. The ability to work independently and interact with a broad range of scientists and clinicians is essential.

Interested applicants should submit a curriculum vitae and the names, addresses, and telephone numbers of three references by October 15, 1998, to:

> Michael L. Cleary, M.D. Department of Pathology Stanford University Medical Center 300 Pasteur Drive Stanford, CA 94305-5324 FAX: 650-498-6222

SENIOR RESEARCH SCIENTIST STANFORD UNIVERSITY SCHOOL OF MEDICINE Stanford, California

Position available immediately for a Ph.D. with three to 15 years of experience in flow cytometry (advanced operating ability required), applied to the study of immune cell function. Experience in molecular biology, cell biology, and immunopharmacology is preferred. The applicant must have a strong publication record, excellent speaking and writing skills, and record of grant and/or contract approvals. The position will entail managing a drug discovery and drug development research team investigating the pharmacodynamics and molecular mechanisms of action of new immunoregulatory molecules for allo- and xenotransplantation, and the effects of anticancer drugs on the immune system.

Salary: \$55,000 to \$100,000 per year depending on experience.

Send curriculum vitae, list of publications, list of grant/ contract awards, and four letters of recommendation to:

Search Committee c/o Randall Morris, M.D. Department of Cardiothoracic Surgery Stanford University School of Medicine Stanford, CA 94305-5407 Telephone: 650-723-6016 FAX: 650-725-3846

E-mail: hf.clh@forsythe.stanford.edu

Equal Opportunity/Affirmative Action Employer.

NEUROBIOLOGY UNIVERSITY OF PITTSBURGH

The Department of Neurobiology, University of Pittsburgh School of Medicine, is inviting applications for a **TENURE-TRACK** position at **ALL RANKS**. Preference will be given to applicants using invertebrate or vertebrate model systems to study the genetic basis of behavior. It is expected that the successful candidate will conduct a competitive, independent research program that will complement current department strengths in cellular, developmental, and systems neurobiology. The position requires a Ph.D. and/or M.D. with at least two years of postdoctoral experience. Competitive salary support and start-up funds will be made available. Applicants should submit by December 1, 1998, a curriculum vitae, a detailed description of present and future research goals, representative recent publications, and names and ad dresses of three references to: Dr. Pat Levitt, Chair, Behavioral Genetics Search, Department of Neurobiology, University of Pittsburgh School of Medicine, E1446 Biomedical Science Tower, Pittsburgh, PA 15261.

The University of Pittsburgh is an Equal Opportunity Employer.

POSITIONS OPEN

GENE LOGIC

SENIOR RESEARCH SCIENTIST

Gene Logic, Inc. combines powerful genomics and bioinformatics technologies to accelerate the discovery and development of pharmaceuticals. We currently have an opening for an experienced Senior Research Scientist to carry out research with our READS research and development group in the area of disease-related gene discovery.

You should have a Ph.D. in molecular biology, biochemistry, genomics, or a related field, plus two to four years of postdoctoral experience. Desirable characteristics include experience in methods development in molecular biology and strong knowledge of techniques such as PCR, RNA extraction, and cDNA cloning. Candidates should be team players committed to excellence in science with strong written and oral communications skills.

At Gene Logic, you'll enjoy a comprehensive salary and benefits package. To apply, please send your résumé and cover letter to: Gene Logic, Inc., 708 Quince Orchard Road, Gaithersburg, MD 20878. FAX: 301-987-1805; e-mail: hr@genelogic.com. Equal Opportunity Employer.

SENIOR ONCOLOGIST/CLINICAL SCHOLAR METABOLISM BRANCH NATIONAL CANCER INSTITUTE, NIH

The Metabolism Branch, NCI, NIH, invites applications for a Senior Oncologist or Clinical Scholar (tenuretrack) position for an individual interested in joining a newly formed clinical trials unit focusing on the translation of laboratory-based immunological studies into clinical trials. This position offers exciting opportunities to make substantial contributions to clinical trials including those involving therapy of patients with T and B cell leukemia/lymphoma or with solid tumors using mono-clonal antibodies armed with alpha- and beta-emitting radionuclides or toxins, as well as trials of peptide vaccines for the treatment of patients with epithelial neoplasms. The candidate must have an M.D. degree, have a valid license in any state, and be Board-certified or Boardeligible in hematology, oncology, or infectious disease. The duties and responsibilities include a leadership role in structuring the clinical trials unit, and in the provision of care for patients enrolled in the Metabolism Branch. Other responsibilities would include the generation and execution of clinical studies, management of branch-based protocols, the supervision of Clinical Fellows, and participation in clinical Boards including the IRB/NCI. Expertise in the clinical management of patients with leukemia/ lymphoma is particularly desirable. In addition to strong clinical skills the candidate must have good organizational skills, and be effective in verbal and written communica-tion. The salary range will be from \$118,400 to \$151,800. The successful candidate may be eligible for medical school loan repayment. Interested candidates should send their curriculum vitae, and statement of relevant experience, as well as the names, addresses, and telephone numbers of three professional references to: Jean Decker, Building 10, Room 4N115, 10 Center Drive, MSC 1374, Bethesda, MD 20892-1374. Applications must be postmarked by November 15, 1998 NIH is an Equal Opportunity Employer.

The University of California at Los Angeles is recruiting a DIRECTOR of the Dental Research Institute (DRI available July 1, 1999. The Director will also be appointed as a Professor with tenure in the School of Dentistry. A MOLECULAR BIOLOGIST with a research background in orofacial diseases or abnormalities is preferred. The candidate must have a Ph.D. or D.D.S. (D.M.D.) Ph.D. and must be experienced in research administration, tenured at their present institution, and bring sub-stantial extramural funding with him/her to UCLA. The objective of the DRI is to study the basic mechanisms of disease in the orofacial region through original research. Applicants should submit a curriculum vitae and the names of three references to: Dr. Robert Lindemann, Associate Dean for Academic Programs and Personnel, UCLA School of Dentistry, Room 53-038 CHS, Box 951668, Los Angeles, CA 90095-1668. E-mail: robertl@dent.ucla.edu. The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants are encouraged to apply, including women and minorities.

POSITIONS OPEN DIRECTOR, GRADUATE PROGRAM IN MARINE BIOLOGY

Applications are invited for the Director of the M.S. Degree Program in Marine Biology at the University of Charleston, South Carolina. The position involves 50 per-cent administrative duties and 50 percent research and teaching. The program is housed at the Grice Marine Laboratory at Fort Johnson on Charleston Harbor. The graduate faculty comprises over 100 individuals from the University of Charleston and other Fort Johnson institutions including the Marine Resources Research Institute of the South Carolina Department of Natural Resources, the Medical University of South Carolina, the National Oceanic and Atmospheric Administration/National Ocean Service Center for Coastal Environmental Health and Biomolecular Research, and The Citadel. The elevenmonth appointment carries faculty status at the Associate Professor or Professor level in the Department of Biology at the College/University of Charleston. Candidates should have (1) demonstrated scientific achievement as evidenced by publications and a record of externally funded research in marine biology, (2) teaching experience in graduate and undergraduate programs, (3) administrative experience, particularly in a marine laboratory/university setting. An earned Ph.D. is required. Applicants should submit by 6 November 1998 a curriculum vitae, recent publications, and three letters of reference to: Chair, Department of Biology, University of Charleston, Charleston, SC 29424. Further information is available website: www.cofc.edu/~biology/biology.htm. at The University of Charleston is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

SUPERVISORY MICROBIOLOGIST

USDA, Agricultural Research Service is seeking a RE-SEARCH LEADER (Supervisory Microbiologist) to lead a research unit and conduct personal research on foreign animal diseases, at the Plum Island Animal Disease Center, Orient, New York. The research unit conducts fundamental and applied research on foot-andmouth disease, vesicular stomatitis, and other viruses as assigned, for the purpose of developing practical methods of detection and control of these important livestock diseases. Candidates must be knowledgeable in virology, nolecular biology, immunology, pathogenesis of viral diseases, protein and nucleic acid biochemistry, recombinant DNA technology, monoclonal antibody technology, vaccine development, and diagnostic test evaluations. A D.V.M.-Ph.D. (or equivalent) or Ph.D. degree is desired, with at least five years of postgraduate degree experience and demonstrated accomplishments in at least one area of the disciplines listed above. Candidates must be U.S. citizens. Salary is commensurate with experience, \$67,700 to \$90,219, plus benefits. For information on the research program/position contact: **Dr. Alfonso Torres, Tele**phone: 516-323-2500, ext. 207. For application information/instructions, please contact: Maria Martocchia, Telephone: 516-323-2500, ext. 346. ARS is an Equal Opportunity Employer.

SCIENTISTS

Clear Solutions Biotech Inc. (CSBI) is seeking experienced Ph.D., M.S., and B.S.-level scientists to develop biomaterials-based products to address wound healing, tissue regeneration and repair, and drug delivery applications. CSBI is located on the campus of the State University of New York at Stony Brook and enjoys access to the University's resources. Please forward a letter of interest together with a résumé to: Philip Dehazya, Ph.D., Clear Solutions Biotech Inc., 25 East Loop Road, Stony Brook, NY 11790. FAX: 516-689-6880; e-mail: csbi@collabo.com. For more information, visit website: www.collabo.com. An Equal Opportunity Employer/Minoritics/Fenales/Disabled/Teterans.

POSTDOCTORAL POSITION

Postdoctoral position available in molecular virology of HIV-1 in the female genital tract. Projects are designed to identify the cellular source(s) of HIV-1 expressed in female genital tract and factors that regulate levels of virus expression. Background in molecular biology and HIV-1 virology preferred. Please send curriculum vitae and three references to: Dr. Jeffrey Lennox, Division of Infectious Diseases, Emory University School of Medicine, 69 Butler Street S.E., Atlanta, GA 30303.

Emory University is an Equal Opportunity Employer.



The best way to get your foot in the door is to get there first. *Science*'s new e-mail Job Alerts service allows you to receive advance notification about new jobs appearing on *Science* Professional Network. If you're looking for a new position, or just testing the market, make Job Alerts part of your search...

- **FAST:** Each week you'll receive e-mail notification about jobs on *Science* Professional Network that match your search criteria.
- FREE: There's no charge. All you do is register. Go to www.scienceonline.org click on *Science* Careers then click on Job Alerts.

• **EASY:** Simply select the appropriate criteria for positions that fit your job search profile. After you've completed the form, the Job Alerts system automatically notifies you via e-mail about new positions. Hundreds of new positions are posted each week.

Science JOB ALERTS Go to www.scienceonline.org and click on *Science* Careers. As a pharmaceutical company with innovative research and development, we are looking for a

laboratory head for high-throughput screening/HTS

for our Department of Cancer Research in Frankfurt/Main, Germany.

You will be responsible for new and maintanance of established robotic systems for high-throughput screening of chemical/natural compound libraries which includes generating and validating new assays suitable for automatic screening. The HTS laboratory is part of an interdisciplinary research group mainly focused on molecular targets important for cancer cell growth.

We expect that you have finished your studies in biochemistry, molecular biology/biotechnology, or chemistry with a Ph.D. dissertation, or that you have alternatively focused on medicinal engineering with extensive job experience. You should have intensive knowledge of modern cellular and molecular biology including standard methodology and screening assays (e.g. cellular reporter gene or biochemical in-vitro assays). For data handling and running the robots, MS Excel, ISIS, Oracle, Beckman Sami and Bioworks are the basic software tools. As a part of a highly motivated team you should be able to communicate well, have social competence and show flexibility.

As an international company, we offer you a challenging job in an interactive team environment. The compensation package reflects the importance of this position. Please send your resume/C.V. and letter of interest to: **ASTA Medica AG, PVF-1, Weismüllerstr. 45, 60314 Frankfurt/Germany.** Interested in our company? Please take a look at: http://www.astamedica.de



A Company of Degussa

POSTDOCTORAL / Ph.D. POSITIONS AT THE NEWLY FOUNDED

RESEARCH CENTER FOR ORNITHOLOGY OF THE MAX-PLANCK-SOCIETY

2 Postdoctoral or Ph.D. positions are available to investigate

(1) Behavioural and endocrinological aspects of avian circadian rhythms. Research will focus on either the role of melatonin and the pineal gland as components of the circadian pacemaker or circadian involvement in learning, and

(2) Cellular physiology and neuroendocrinology of biological clocks. Our methods include neuroanatomical tract tracing and immunocytochemistry, *in vitro* culture techniques, biochemical analyses of neurotransmitter release, and electrophysiology. Applicants should have experience in at least one of these techniques.

Please send curriculum vitae and a description of your research experience for (1) to Prof. Eberhard Gwinner (e-mail: gwinner@erl.ornithol.mpg.de) and (2) to Dr. Roland Brandstätter (e-mail: brandstaetter@erl.ornithol.mpg.de), Research Center for Ornithology of the Max-Planck-Society, Von-der-Tann-Strasse 7, D-82346 Andechs, fax: +49-8152-373-33. MDS Panlabs, located on the Eastside of Seattle, Washington, has the following employment opportunity. Join MDS Panlabs Pharmacology Services Division, one of our core businesses.

Ph.D. Scientist, Molecular Pharmacology, Biochemical Pharmacology Assay Development (Position #98-47)

Focus on rapidly developing and validating a variety of molecular pharmacology tests used by the pharmaceutical industry to profile new drug leads in a broad range of therapeutic areas. Duties include methods development and validation of a broad variety of molecular pharmacological testing assays including measurements of radioligand binding, enzyme kinetics and inhibition, and cellular responses. The candidate will also write standard operating protocols, and assist in assessment and prioritization of assay targets. Skills in molecular biology desirable.

Emphasis will be on development assays related to allergy/inflammation/cancer, and central nervous system indications.

Position requires excellent written and oral communication skills and an ability to act as a resource in technical consultations with and presentations to pharmaceutical industry clients. A Ph.D. in immunology, pharmacology, molecular biology, biochemistry, or related discipline with 2–5 years of industry experience is required. Submit résumé to:

> MDS Panlabs Attn: Human Resources #98-47 11804 North Creek Parkway South Bothell, WA 98011 Or FAX: 425-487-3787 An Equal Opportunity Employer

POSITIONS OPEN

WHITAKER EMINENT SCHOLAR IN SCIENCE FLORIDA GULF COAST UNIVERSITY COLLEGE OF ARTS AND SCIENCES

The Whitaker Foundation has endowed an Eminent Scholar position in science and provided funds for building a Center for Science, Math, and Technology Education at Florida Gulf Coast University. The College of Arts and Sciences is seeking an eminent person in science, environmental studies, science education, or technology at Professor rank, or equivalent credentials, to teach in and provide leadership for the development of this Center.

The Center's purpose is to build a model undergraduate program with emphasis on integrating the sciences, using technology to best advantage, and providing hands-on experience for students. Candidates should be willing to think outside traditional academic boundaries and be committed to improving undergraduate science education.

Salary is commensurate with qualifications. The January 1999 beginning date is negotiable. Appointment will be made on a multiple-year contractual basis. To apply, submit two copies of each of the following: letter of interest, curriculum vitae, and a list of five references. Mail to: Florida Gulf Coast University, Director, Human Resources, Position #10501 FGCU Boulevard South, Ft. Myers, FL 33965-6565 postmarked by the deadline date of October 22, 1998 (review of credentials by the search committee has begun and will continue until the position is filled). If you previously applied you need not reapply, your materials will be considered. For additional information, visit our website: http://www.fgcu.edu or call the jobline at Telephone: 941-590-1111. Under Florida law, applications submitted are available for public review upon request.

Florida Gulf Coast University is an Equal Opportunity/Equal Access/Affirmative Action Institution which has a commiment to cultural, racial, and ethnic communities and encourages women and minorities to apply. It is expected that successful candidates share in this commitment.

ANATOMIST

The Department of Anatomy at Mayo Medical School and Mayo Clinic/Foundation is seeking an Anatomist who is qualified to teach gross anatomy, microscopic anatomy, and embryology. Mayo Medical School is the smallest medical school in the United States with only 42 students per class. The candidate will be expected to share equally in the anatomy instruction to medical students, plus conduct review courses for residents. Teaching duties vary during the year, leaving some opportunities for re-search. The candidate will have access to state-of-the-art facilities and excellent opportunities for collaboration. A Ph.D. or comparable degree is required. Applicants are asked to submit a letter of interest along with their curriculum vitae and the names of three references to: Stephen Carmichael, Ph.D., Chair, Anatomy Search Committee, Mayo Clinic, Rochester, MN 55905 by 1 November 1998. You may contact Dr. Carmichael at e-mail: carmichael.stephen@mayo.edu. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

Mayo Clinic RESEARCH ASSOCIATE position or RESEARCH FACULTY position is available in the Transplant Immunology Program. The candidate should hold a Ph.D. and have at least three years of postgraduate experience. Applicants should have a strong background in molecular biology or protein or carbohydrate biochemistry. Experience in immunology and cellular physiology is desirable. Send a current curriculum vitae, bibliography, a description of research experience, and three letters of recommendation to: Jeffrey L. Platt, M.D., Director of Transplantation Biology, Departments of Surgery, Immunology, and Pediatrics, Mayo Clinic, Medical Sciences Building 2-79, 200 First Street S.W., Rochester, MN 55905. Mayo Foundation is an Affinative Action and Equal Opportunity Employer and Educator.

RESEARCH ASSOCIATE to study effects of environmental agents on cell signaling. Experience in signaling and gene expression essential. Salary up to \$40,000. Send letter and curriculum vitae listing three referces to: Dr. Toby Rossman, Nelson Institute of Environmental Medicine, New York University Medical Center, 57 Old Forge Road, Tuxedo, NY 10987 (a rural environment 50 miles north of New York City). E-mail: rossman@charlotte.med.nyu.edu. Equal Opportunity Employer.

POSITIONS OPEN

PROJECT MANAGER MAIZE GENOMICS CENTER

A scientist experienced in genetics and related sciences is needed to provide administrative oversight for the inaugural Project of the new Maize Genomics Center at the University of Missouri-Columbia. The Project focuses on developing physical, genetic, and bioinformatics resources for the maize genome. The research will be conducted by scientists at the University of Missouri, Clemson University, and the University of Georgia. The Project Manager/Research Assistant Professor will report to the Director of the Center and will be responsible for developing a detailed understanding of all scientific aspects of the project; facilitating communication among participants, both on-campus and at collaborating sites; and responding to inquiries or requests from gov-ernment agencies. University offices, visitors, and the press. Qualified individuals are expected to have excellent interpersonal skills and demonstrated experience in monitoring progress of projects; writing grants and reports; devising presentation materials; managing budgets; and handling re-cruiting and personnel matters. Applicants should mail a cover letter, curriculum vitae containing complete record of training and experience, and names of three references to: Dr. E. H. Core, Director, Maize Genomics Center, 210 Curtis Hall, University of Missouri, Columbia, MO 65211-7020. The University of Missouri-Columbia is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE IN CLINICAL PHARMACOLOGY

The Division of Clinical Pharmacology and Medical Toxicology in the Department of Medicine at the Uniformed Services University of the Health Sciences and the Henry M. Jackson Foundation invite applications for the position of Research Associate in the area of pharmacokinetics and drug metabolism. The position is available immediately and provides full funding for salary and fringe benefits. Applicants must have a Ph.D. or Pharm.D. with appropriate postdoctoral training and direct experience in drug metabolism, pharmacokinetic analysis, and analytical experience including HPLC. Salary is commensurate with experience. Interested applicants please send a cover letter, curriculum vitae, and three letters of reference to: Louis R. Cantilena, Jr., M.D., Ph.D., Director, Division of Clinical Pharmacology and Medical Toxicology, Room B2020, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.

POSTDOCTORAL POSITIONS available in plant molecular genetics: posttranscriptional regulation, the actin cytoskeleton, and the engineered phytoremediation of heavy metal pollution in soil and water. Molecular genetics experience required. Closing date is June 30, 1999. Send curriculum vitae and three references to:

Richard B. Meagher, Professor Department of Genetics Life Sciences Building University of Georgia Athens, GA 30602 Website: http://www.genetics.uga.edu/faculty/ bioMeagher.html

The University of Georgia is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT ATTENDING IN NUCLEAR MEDICINE

Memorial Sloan-Kettering Cancer Center is seeking a Board-certified Nuclear Medicine Physician for a position as Assistant Attending in nuclear medicine. The individual should have at least three years of experience in clinical nuclear medicine, demonstrated evidence of scholarly pursuits of clinical problems, and a commitment to teaching. PET experience is highly desirable. Please send inquiries to: Steven M. Larson, M.D., Chief, Nuclear Medicine Service, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

POSITIONS OPEN

STANFORD UNIVERSITY DEPARTMENT OF ELECTRICAL ENGINEERING Digital Image and Video Systems

The Stanford University Department of Electrical Engineering (website: http://ee.stanford.edu) seeks candidates for a faculty position in the general area of digital image and video systems. The successful applicant will possess broad talents in both theoretical fundamentals and modern applications, including but not limited to specializations such as image and video signal processing, content extraction, capture, analysis, interpretation, modeling, segmentation, enhancement, motion estimation, compression, coding, storage, transmission, display, printing, and rendering. Applications of interest include medical and multispectral image processing, document processing, World Wide Web–based images, streaming video, and digital photography. An earned Ph.D., evidence of the ability to pursue independent research, and a strong commitment to both graduate and undergraduate teaching are required.

The search is open at all levels, from tenure-track AS-SISTANT PROFESSOR to tenured FULL PROFES-SOR. The successful candidate will be expected to build and maintain a high-quality research and teaching program in cooperation with the interdisciplinary Image Systems Engineering Program (website: http://isep. stanford.edu). Specific teaching duties include a graduate class on digital image processing, an undergraduate introductory class on signal processing, and possibly a new class on image, video, and multimedia systems.

Applications should include a résumé with a publication list (and academic transcripts for recent graduates), a brief research and teaching plan, and the names of at least five references. Applications should be mailed to: Professor Robert M. Gray, Search Committee Chair, Department of Electrical Engineering, 127 Durand Building, Stanford, CA 94305-9510. The deadline for receipt of applications is 1 December 1998.

Stanford University is an Affirmative Action Employer seeking to increase representation of minorities and women among its faculty.

MEDICAL CONSULTANT/WRITER

Medical education firm seeks freelance Medical Writers with either a Ph.D. in physiology, pharmacology, or related field, M.D. or Pharm.D. with Residency/Fellowship credentials. Experience in preparation of manuscripts or other educational materials (e.g., slides, monographs, newsletters). Excellent skills in interpretation and application of preclinical and clinical data are required. Specialization in or familiarity with cardiovascular, neurologic, oncologic, gastrointestinal, pulmonary, psychiatric, endocrinologic, or infectious disease states and treatment options is highly desirable. Successful candidate will be responsible for preparation of educational materials in conjunction with project Medical Director. Applicants should send a curriculum vitae, writing samples, and cover letter indicating areas of expertise to: Applied Clinical Communications, 1160 Parsippany Boulevard, Parsippany, NJ 07054, Attn: Director, Publications.

Peptide synthesis. The BioResource Center at Cornell University seeks a STAFF SCIENTIST to coordinate the activities of the peptide synthesis service. Primary responsibilities will include designing and implementing the synthesis of target peptides, developing appropriate quality control strategies, and related supervisory duties. Qualified candidates will have a recent Ph.D. or a M.S. with three-plus years of relevant experience. Applicants should send a cover letter, a curriculum vitae, and three letters of reference to: Theodore W. Thannhauser, Ph.D., Director, BioResource Center, Room 149 Biotechnology Building, Cornell University, Ithaca, NY 14853-2703. Electronic submission will be accepted at e-mail: tt34@cornell.edu. Cornell is an Equal Opportunity/ Affinative Action Employer and Educator.

POSTDOCTORAL FELLOWSHIPS. Penn State College of Medicine. Positions available to study regulation of gene expression: (1) the mechanisms of transcription activation employed by the distinct constitutive and kinase-inducible activation domains in CREB; and (2) the mechanisms involved in counter-regulation of PEPCK gene transcription by cAMP and insulin. Send curriculum vitae to: Patrick G. Quinn, Ph.D., Department of Cellular and Molecular Physiology, Penn State College of Medicine, 500 University Drive, H166, Hershey, PA 17033. E-mail: pquinn@psu.edu. An Affirmative Action/ Equal Opportunity Employer. Women and minorities encouraged to apply.

Director

of the John Innes Centre and John Innes Professor of Biology at the University of East Anglia

Applications are invited for the position of Director of the John Innes Centre (JIC), located on the Norwich Research Park. The appointment is made by the John Innes Governing Council in consultation with the Biotechnology and Biological Sciences Research Council (BBSRC), the trustees of the John Innes Foundation and the University of East Anglia. The appointment carries with it appointment to the John Innes Chair of Biology in the School of Biological Sciences at the University of East Anglia.

The Director is accountable both to the John Innes Governing Council, through its Chairman, and to the Chief Executive of BBSRC for the conduct and work of the Centre. The appointee is expected to make a major contribution to the development and implementation of the plant and microbial science research strategy of the BBSRC.

JIC is scientifically, physically and administratively linked with the Sainsbury Laboratory, a laboratory established as a joint venture between the Gatsby Charitable Foundation, the University of East Anglia, the BBSRC and the John Innes Foundation.

JIC has a workforce, including visiting scientists, of some 750, with an annual budget of approximately £21 million.

The Centre's mission is to conduct high quality research and postgraduate training relating to the understanding and



IOHN INNES CENTRE

exploitation of plants and micro organisms. The Director will manage the Centre programmes and will be encouraged to maintain active personal research; facilities and staff will be made available.

The starting salary will reflect the responsibilities of the post and the importance we attach to this appointment; relocation expenses may be available.

Applicants must be highly qualified in a relevant branch of the biological sciences with an international reputation in research. Proven management skills are essential and commercial experience a major advantage.

For further particulars and an application form, contact: Mr Robert Price, Director of Human Resources, BBSRC Office, Polaris House, North Star Avenue, Swindon SN2 1UH. Telephone 01793 413245. Email Robert.Price@BBSRC.ac.uk

For more information or an informal discussion, contact: Professor Raymond Baker, FRS, BBSRC Chief Executive on 01793 413208 or Mr Vincent Watts, Chairman, John Innes Council on 01603 592206.

The closing date for applications is 26 October 1998. The John Innes Centre is an equal opportunities employer.

The Wellcome Trust Training Fellowships for Research into Infectious Diseases for Scientists from Tropical and Developing Countries

The Trust recognises the continuing threat of infectious diseases in tropical and developing countries and wishes to develop research expertise which is sustainable in these countries in order to address health problems arising from infectious diseases. The awards are intended to provide both training and research experience for applicants, who must be based in a developing or tropical country. The training will be obtained at international centres of excellence in either the UK. Republic of Ireland. or any country in the developing or restructuring world, and a substantial period of research will be undertaken in the applicant's home country. For instance, a four year award would normally include a minimum of two years' research in the home country over the period of the award. AIDS/HIV related studies relevant to tropical regions are fully supportable.

Eligibility: applications are invited from postdoctoral basic scientists or medical graduates of up to six years' research experience (postdoctoral) who are nationals of developing countries. Applications may be considered in exceptional circumstances from those who are educated to first degree or Master's level, who are able to demonstrate substantive potential for research and operational leadership and who have research experience equivalent to a PhD, as evidenced by their publication record. Applicants will wish to become independent research scientists through high quality research into infectious diseases of regional significance to their home country. The research proposal must include a clear argument outlining the relevance of the project to the home country. Applications will be assessed on the basis of the candidate's achievements in research, the scientific merit of the proposal and

the appropriateness of the research for the proposed location. The nature of the training component and the training site chosen must be appropriate for the proposed research.

Funding: awards will be for a maximum of four years, nonrenewable. Fellowship support may include a salary/stipend appropriate to the countries in which the candidate will be studying/working, as well as project-dedicated and travel expenses. All expenses must be fully justified. Consideration may also be given to the expense of attending a course leading to a recognised qualification in a discipline relevant to the fellowship research programme.

Application Procedure: the preliminary approach to the Trust should include an outline of the proposed research, an approximate budget and curriculum vitae of the applicant, together with a written guarantee of subsequent employment from the host institution in the applicant's home country and a letter of support from a suitable sponsor at the training institution. Applications will be considered throughout the year.

Further information about the initiative can be obtained from: The Grants Section (Tropical), The Wellcome Trust, 183 Euston Road, London NW1 2BE. Tel: 0171 611 8409. Fax: 0171 611 7288. Information is also available on the Web site (www.wellcome.ac.uk).

NB: Applicants may not apply for more than one Trust fellowship scheme at any one time.



The Wellcome Trust is a Registered Charity, No. 210183, and seeks to support research in biomedical sciences and the history of medicine by means of grants and other activities

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW-SHIPS. Virginia Mason Research Center (VMRC), Seattle, Washington. The immunology and diabetes research programs at Virginia Mason Research Center are expanding into newly constructed research facilities with new postdoctoral research opportunities. Successful candidates will join a highly interactive biomedical research institute focusing on autoimmunity, genetics, and the molecular and cellular biology of the human immune system. Applications from highly qualified recent Ph.D. or M.D. Investigators are invited for projects including (1) immunogenetics of epitope-specific T cell responses in type I diabetes (G. Nepom); (2) MHC-peptide struc-ture/function studies (W. Kwok); (3) antigen recognition in polychondritis and related disorders (J. Buckner); (4) molecular control of T-cell proliferation by the inter (1) Instead of the second o should send statement of research interests, curriculum vitae, and list of references to the Investigator listed above or to: Gerald T. Nepom, M.D., Ph.D., Director, Vir-ginia Mason Research Center, 1000 Seneca Street, Seattle, WA 98101. Further information on VMRC programs can be found at website: www.vmmc.org/vmrc. Please respond by October 30, 1998. VMRC is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS available immediately to study the biological bases of nervous system disorders in a multidisciplinary, highly interactive setting. Limited to U.S. citizens or permanent residents with M.D., Ph.D. Mentors and projects include: Gary J. Bennett: painful peripheral neuropathies. Douglas Baird: axon growth and guidance. John Chapin: neuro-robotics. Donald Faber: synaptic transmission. Itzhak Fischer: gene therapy in spinal cord injury. Simon Giszter: motor control in spinal cord. Lorraine Iacovitti: stem cells in treating Parkinson's disease. Marion Murray: recovery of function by transplants after spinal injury. Martha Nowycky: exocytosis and endocytosis in neuroendocrine cells. Alan Tessler: survival and regeneration of injured neurons. Michael White: structure-function in neurotransmitter receptors. Collaborations between laboratories are encouraged. Send curriculum vitae, statement of research in-terests, and names of three references to: Dr. D. S. Faber, Department of Neurobiology and Anatomy, Allegheny University of the Health Sciences, 3200 Henry Avenue, Philadelphia, PA 19129. FAX: 215-843-9082; e-mail: dfaber@auhs.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS JOHNS HOPKINS ONCOLOGY CENTER

Postdoctoral positions are available to study genes involved in the proliferation and/or differentiation of hematopoietic stem cells. A strong background in molecular and cellular biology is desired. Starting salary of \$28,000. Please send or FAX curriculum vitae and three references to: Donald Small, M.D., Ph.D., Oncology Center 3-109, Johns Hopkins University School of Medicine, 600 North Wolfe Street, Baltimore, MD 21287. FAX: 410-955-8897. Johns Hopkins University is an Equal Opportunity/Affinative Action Employer.

THREE POSTDOCTORAL POSITIONS

To study structure and function of the ribosome using three-dimensional cryo-electron microscopy. (1) Ribosomal biochemistry; (2) time-resolved imaging (background cryo-electron microscopy, physics); (3) modeling of ribosomal RNA. (See, e.g., recent article of: Agrawal et al., *PNAS* 95:6134, 1998.) Apply to: Dr. Joachim Frank, Howard Hughes Medical Institute, Wadsworth Center, Empire State Plaza, P.O. Box 509, Albany, NY 12201-0509. FAX: 518-486-2191; e-mail: joachim@wadsworth.org.

POSTDOCTORAL RESEARCH FELLOWSHIP

Creative scientist sought with research interest in molecular mechanisms of insulin/LH action on theca-cell androgen biosynthesis. Requires M.D. and Ph.D. degree in biochemistry or related discipline, RT-PCR hnRNA quantitation experience, and a strong publication record. Salary \$30,000. Applications should include curriculum vitae and three letters of reference. Mail to: J. D. Veldhuls, M.D., Box 202 McKim Hall, University of Virginia Health Sciences Center, Charlottesville, VA 22908 USA. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY Medical University of South Carolina Charleston, South Carolina

Postdoctoral positions are currently available in the Department of Microbiology and Immunology at the Medical University of South Carolina. A Ph.D., M.D.-Ph.D., or equivalent is required. Desirable qualifications are based on Principal Investigator's interest for research. Additional information about the Medical University can be found at website: http://www.musc.edu.

Gene therapy: Postdoctoral positions available to study development of gene therapy vectors (ribozymes and others) and systems for vector delivery to prokaryotes and eukaryotes, including humans. Experience in molecular biology essential. Project Investigator: James S. Norris, Ph.D.

Gene therapetucs: One Postdoctoral position is available immediately to study the efficacy of novel gene therapy vectors in small animal models. Project Investigator: Steven D. London, D.D.S., Ph.D.

Virology: Research is focused on developing applicable strategies for gene therapy of genetic diseases and cancers. Studies will lead to the development of efficient vector systems using cutting-edge technologies in basic molecular biology, virology, and immune modulations. Candidates must have a Ph.D. in related field. Project Investigator: Jian-yun Dong, M.D., Ph.D.

Mucosal immunity: Two Postdoctoral positions are available immediately to study T and B cell immunity of the gut, lung, and oral cavity in reovirus-infected mice. One position requires experience in molecular cloning techniques. Project Investigator: **Steven D. London**, **D.D.S.**

Send curriculum vitae, statement of research experience and interests, and three letters of reference to the attention of the specific Project Investigator at:

Department of Microbiology and Immunology Medical University of South Carolina 171 Ashley Avenue Charleston, SC 29425 FAX: 843-792-2464

Women and minorities are strongly encouraged to apply. The Medical University of South Carolina, Charleston, South Carolina 29425 is an Equal Opportunity/Affirmative Action Employer.

TWO POSTDOCTORAL POSITIONS UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE

The Division of Endocrinology at the University of Cincinnati College of Medicine has two Postdoctoral positions available immediately. These individuals will join a multidisciplinary group investigating the biology of inform life growth factor I and its major binding proteins in vascular smooth muscle and bone osteoblasts in transgenic mouse models. Technical experience in molecular cloning and creation and analysis of transgenic moice is desirable. Applicants must have less than five years of postdoctoral experience. The initial appointment is for three years with a starting salary of at least \$26,500 depending on experience. Applicants should submit a curriculum vitae and three references to: Thomas L. Clemens or James A. Fagin, Division of Endocrinology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Room 5564, Cincinnati, OH 45267-0547. E-mail: clementl@uc.edu, james.fagin@ uc.edu.

POSTDOCTORAL FELLOWSHIPS IN FRESHWATER CONSERVATION

The Nature Conservancy (TNC) announces the David H. Smith Conservation Research Fellowship Program, which will provide two-year postdoctoral support in applied conservation biology. Each Fellow will carry out research with an institution selected by the Fellow and a TNC mentor. Research will focus on priority TNC sites or questions germane to them. First-round Fellowships (proposals due October 23, 1998) focus on the conservation of U.S. freshwater systems and begin January 1, 1998. Second-round Fellowships begin August 1999; RFPs available October 31, 1998, and due February 1999. To request RFPs e-mail or write: Smith Conservation Fellows Program, Conservation Science Division, The Nature Conservancy, 1815 North Lynn Street, Arlington, VA 22209. E-mail: postdoc@ tnc.org

POSITIONS OPEN

RESEARCH OPPORTUNITIES IN CELLULAR AND MOLECULAR IMMUNOLOGY AND PROTEIN CHEMISTRY AT NATIONAL CANCER INSTITUTE

Immediate openings exist for full-time **POSTDOC-TORAL FELLOWSHIPS** in the Tumor Immunology Section, Surgery Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, to study the immune response to tumors in humans and in mice.

One project aims to study tumor proteins recognized by immune cells, and requires a strong background in protein purification and molecular biology. For additional positions, we seek candidates with experience in cellular immunology as well as molecular biology. Ongoing projects include the identification of new tumor-associated antigens, the study of immune tolerance to tumorassociated differentiation antigens, and the development of synthetic and recombinant anti-cancer vaccines.

Applications must be postmarked by October 9, 1998. Send cover letter, curriculum vitae, and statement of research interests to:

Steven A. Rosenberg, M.D., Ph.D. Chief of Surgery National Cancer Institute Building 10, Room 2B42 Bethesda, MD 20891-1502 Telephone: 301-496-4164

Selections for these positions will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization. The NIH is an Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS (two) in cardiovascular research available for one to three years. University of Missouri has a strong program in cardiovascular sciences, spanning Colleges of Medicine, Veterinary Medicine, and Dalton Cardiovascular Research Center. One position will focus on cellular mechanisms responsible for cardiac Ca channel dysfunction associated with endotoxemia including second messenger regulation and potential Ca channel-cytoskeletal interactions. Second position will explore exercise-induced adaptations in porcine coronary artery function and include studies of adenosine transport/metabolism and/or K channel function. The successful applicant will possess a D.V.M., Ph.D., M.D., or equivalent. Experience in second messenger biochemistry, cytoskeletal regulation of membrane events, electrophysiology, and/or confocal microscopy preferable. Strong interest and/or background in some aspect of cardiovascular research essential. Send letter of interest, a recent curriculum vitae, and the names of three references to: Dr. Leona Rubin, Department of Veterinary Biomedical Sciences E102, University of Missouri, Columbia, MO 65211. E-mail: rubinl@ missouri.edu. Minorities and women are encouraged to apply. The University of Missouri is an Equal Opportunity Employer.

SENIOR POSTDOCTORAL FELLOW in molecular biology. Candidate should have experience in gene promoter regulation; experience in footprint analysis and electrophoretic mobility shift assay desirable. Salary is commensurate with past productivity and is in the range of \$35,000 per year. Opportunity exists for eventual promotion to Research Assistant Professor. Send cover letter, curriculum vitae, and names of three references to: Dr. D. Strong, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.

POSTDOCTORAL POSITION on the molecular biology of signal transduction. Send three references and curriculum vitae to:

Dr. Robert Dottin Department of Biological Sciences Hunter College, Room 932N Center for Study of Gene Structure and Function 695 Park Avenue New York, NY 10021 E-mail: dottin@genectr.hunter.cuny.edu

POSTDOCTORAL POSITION available. Research includes the molecular analysis of the actions of vitamin A and retinoic acid during embryonic development in cancer. Send curriculum vitae, names of three references, and a statment of research interest to: Dr. Lorraine J. Gudas, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. An Equal Opportunity Employer/Affirmative Action/ Minorities/Females/Disabled/Veterans.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSISTANT

Worcester Polytechnic Institute (WPI) has a Postdoctoral Research Assistant position available to study the structure of the Na, K-ATPase. Work will focus on determining the three-dimensional organization of transmembrane segments participating in the cation path and binding sites. These studies will use molecular biology (sitedirected mutagenesis, eukaryotic and yeast expression systems) together with protein chemistry and membrane biochemistry techniques. Recent Ph.D. with experience in molecular biology, protein chemistry, enzyme kinetics, or ion transport is preferred. Competitive compensation and benefits package included.

WPI offers a smoke-free environment. Send curriculum vitae, names, telephone numbers, and e-mail addresses of three references to: Dr. Jose Arguello, Worcester Polytechnic Institute, Department of Chemistry and Biochemistry, 100 Institute Road, Worcester, MA 01609-2280. Telephone: 508-831-5326; e-mail: arguello@wpi.edu.

To enrich education through diversity, WPI is an Affirmative Action/Equal Opportunity Employer.

SIGNAL TRANSDUCTION/CELL CYCLE CHECKPOINT AT WASHINGTON UNIVERSITY School of Medicine

POSTDOCTORAL POSITIONS available immediately to characterize PIK-related kinases and their roles in cell signaling and cell cycle checkpoints. Projects include (1) study of novel genes in TOR signaling pathways; (2) study of PIK-related kinases in cell regulation using yeast as a model; (3) understanding of PIK-related kinases in human disorders. Successful candidates must have a recent Ph.D. degree and a strong background in molecular biology, genetics, or biochemistry. Please send curriculum vitae and three letters of recommendation to: Dr. X. F. Steven Zheng, Campus Box 8069, Division of Molecular Oncology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. Washington University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

An immediate opening is available to study the roles of integrin receptors and matrix metalloproteases in angiogenesis and tumor growth. A strong background in molecular biology and biochemistry is desired. Experience in cell biology will also be helpful. Please send curriculum vitae, description of research experience, and three letters of reference to: Peter C. Brooks, Ph.D., University of Southern California School of Medicine, Department of Biochemistry and Molecular Biology, Norris Cancer Center/Topping Tower Room 5409, 1441 Eastlake Avenue, Los Angeles, CA 90033. FAX: 323-865-0514; e-mail: pbrooks@hsc.usc.edu.

POSTDOCTORAL POSITIONS in fungal genetics/plant pathology are available immediately to investigate (1) the nature and mechanisms of genetic changes underpinning virulence variation and (2) the evolution and mode of action of avirulence genes in rice blast fungus *Magnaporthe grisca*. A strong background in molecular genetics is essential. Please contact: Seogchan Kang, Department of Plant Pathology, 311 Buckhout, Penn State, University Park, PA 16802. FAX: 814-863-7217; e-mail: sxk55@psu.edu. Affinnative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available to study the roles of PPARy-RXR signaling and iron-mediated NF-kB activation in phenotypic changes in liver nonparenchymal cells. Strong background in molecular/cell biology required. Send curriculum vitae and three references to: Dr. H. Tsukamoto, University of Southern California, School of Medicine, 2011 Zonal Avenue, HMR-101, Los Angeles, CA 90033. E-mail: reeloz@hsc.usc.edu.

POSTDOCTORAL POSITION available immediately. Investigation of cellular and molecular mechanisms of epithelial electrolyte transport. Major molecular biology experience required. *Proof of U.S. citizenship or its equivalency required.* Mail/FAX curriculum vitae and the names of three references to: Dr. Eugene B. Chang, Department of Medicine, University of Chicago, MC 6084, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 773-702-2281.

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POSITIONS OPEN

X-RAY CRYSTALLOGRAPHY

NIH-funded POSTDOCTORAL POSI-TION available immediately at the Center for Advanced Research in Biotechnology (CARB) for a Protein Crystallographer with a recent Ph.D. to join multidisciplinary team investigating structural basis of antigen recognition by antibodies and T-cell receptors (TcRs). Projects include X-ray crystallographic studies of (1) recombinant TcRs, MHC molecules, and superantigens and (2) antigen-antibody complexes. Experience in protein biochemsitry highly desirable (*Science* 267:1984, 1995; Nature **374**:739, 1995; Nature **384**:188, 1996; Nature **391**:502, 1998). CARB is a joint research center of the National Institute of Standards and Technology and the University of Maryland. State-of-the-art X-ray and computing facilities. Excellent opportunities for collaborative studies with Molecular Biologists and Physical Biochemists. Send curriculum vitae and names of three references to: Dr. Roy Mariuzza, Center for Advanced Research in Biotechnology 9600 Gudelsky Drive, Rockville, MD 20850. E-mail: mariuzza@indigo2.carb.nist.gov.

POSTDOCTORAL FELLOW

A Postdoctoral position is available immediately to study the mechanism of action of paclitaxel and other agents on prostate cancer cells. Emphasis is being placed on defining the components of pathways involved in the control of cell cycle checkpoints and apoptosis. Applicants should have experience in cellular/molecular biology and/or biochemistry. Applicants must also be eligible for NIH funding. Send curriculum vitae and three names of references to:

> Dr. Kenneth Pienta University of Michigan Comprehensive Cancer Center Room 7303 1500 East Medical Center Drive Ann Arbor, MI 48109-0946

POSTDOCTORAL POSITION available immediately to recent graduate. Investigation of cytoplasmic signaling and regulation of TGFB receptor gene transcription during colon carcinogenesis and hepatic fibrogenesis. Models use colon cancer cells and hepatic mesenchymal cells (stellate cells) (*JBC* 268:25132; 270:3642; 271:25994; 273:15913). Major molecular biology expereince required. U.S. ditenship or permanent residency required. Mail/FAX curriculum vitae and the names of three references to: Dr. Bernard Davis, Department of Medicine, University of Chicago, MC4076, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 773-834-1288.

POSTDOCTORAL POSITIONS in functional MRI of the brain available fall 1998. Applicants may have a Ph.D. in cognitive neuroscience or related field. Ongoing projects study the neurobiological basis of executive functions, language, attention, speech perception, motor control, and memory. Send curriculum vitae, statement of research interests, and three references to: Dr. J. R. Binder or Dr. S. M. Rao, Department of Neurology, Medical College of Wisconsin, 9200 West Wisconsin Avenue, Milwaukee, WI 53226. E-mail: srao@mcw.edu. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP available immediately for ongoing NIH-sponsored studies to investigate unusual DNA topoisomerases in African trypanosomes. Interested applicants with a Ph.D. and background in biochemistry, molecular biology, or pharmacology should send a curriculum vitae plus names and telephone numbers of three references to: Dr. Terry Shapiro, Johns Hopkins School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205. FAX: 410-955-2634; e-mail: tshapiro@bs.jhmi.edu.

POSTDOCTORAL and **RESEARCH ASSOCI-ATE** positions available to conduct research on the role of sphingolipids as signal transducers during stress responses in *Saccharomyces cerevisiae* (*J. Biol. Chem.* **272**:30196, **273**: 19437; *Ann. Rev. Biochem.* **67**:27). Experience with yeasts, lipids, enzymology, or signal transduction is required. Send résumé with names of three references to: **Robert Dickson, Department of Biochemistry, University of Kentucky, Lexington, KY 40536-0298.**

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS IN CARDIOVASCULAR RESEARCH

Two Postdoctoral positions are available in the Department of Physiology, The University of Tennessee, 894 Union Avenue, Memphis, TN 38163. One position, under the supervision of Dr. David Mendelowitz (e-mail: dmendel@physiol.utmem.edu), will focus on the neurophysiology of presynaptic and postsynaptic receptors and the synaptic pathways that mediate central cardiorespiratory control. Preference will be given to candidates who have a recent Ph.D. and electrophysiological experi-ence. The second position, under the supervision of **Dr**. Aviv Hassid (e-mail: ahassid@physiol.utmem.edu), will examine the role of nitric oxide and tyrosine phosphatases in vascular remodeling and vascular injury in intact animals. Preference will be given to candidates who have a recent Ph.D. and experience in the techniques of animal surgery and vascular pathophysiology. Send curriculum vitae and the names of three references to the appropriate e-mail address, or FAX: 901-448-7126. The University of Tennessee is an Equal Employment Opportunity/Affirmative Ac-tion/Title VI/Title IN/Section 504/ADA/ADEA Employer.

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE UNIVERSITY OF LOUISVILLE Health Sciences Center Molecular Mechanisms of Birth Defects

Positions available to investigate molecular, molecular genetic, and/or cellular signal transduction mechanisms of mammalian embryonic development. Emphasis directed toward clarification of interactions among signal transduction pathways and transcription factors in regulating gene expression. Background in molecular genetic methodologies, cell and/or developmental biology required. Applicants should submit (1) curriculum vitae, (2) a statement of current research activities, and (3) names of three references to: Dr. Robert Greene, Laboratory of Molecular Craniofacial Development, Department of Biological and Biophysical Sciences, University of Louisville School of Dentistry, University of Louisville, Louisville, KY 40292. The University of Louisville is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

SMITHSONIAN INSTITUTION FELLOWSHIP PROGRAM

GRADUATE STUDENT, PREDOCTORAL, POSTDOCTORAL, and **SENIOR FELLOWSHIPS** in animal behavior, ecology, and environmental science; including an emphasis on the tropics; Earth sciences and paleobiology; evolutionary and systematic biology; history of science and technology. Tenable in residence. It the Smithsonian facilities. Stipends and tenure vary.

parconology, tworthonary and systematic biology, insory of science and technology. Tenable in residence .t the Smithsonian facilities. Stipends and tenure vary. Deadline: January 15 annually. Contact: Office of Fellowships and Grants, Smithsonian Institution, Desk S, Washington, DC 20560-0902. Telephone: 202-287-3271; e-mail: siofg@ofg.si.edu; website: www. si.edu/research+study. An Equal Opportunity Employer.



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