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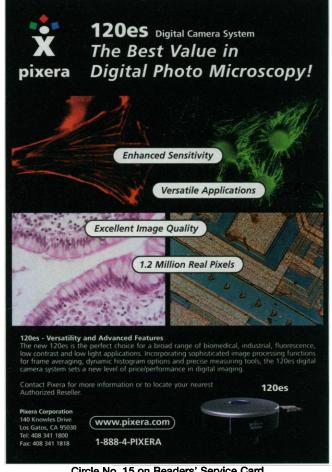
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ties, and references. The catalog also contains an updated pharmacological activity index, an expanded antibody section, and a dedicated chemokine section.

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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Ph.D. candidates who can best explain the marketplace potential of their dissertation.

Last year's first-place winner, Dr. Jan Mark Noworolski of UC Berkeley, was awarded \$50,000 for proposing a single-chip power converter. In addition to receiving cash awards, winners will meet with leading entrepreneurs and venture capitalists to discuss their work. Applications and entry information can be obtained from The Merrill Lynch Forum website at www.ml.com/innovation.

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POSITIONS OPEN

FACULTY POSITIONS IN MOLECULAR BIOLOGY

The Department of Molecular Biology at the University of Wyoming is seeking to fill two tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level. Individuals with training and or experience in the general areas of bioinformatics, genomics, biophysics, and life in harsh environments are especially encouraged to apply. However, strong candidates in all areas of biochemistry, genetics, and microbiology will be considered. Candidates must hold a Ph.D. in an appropriate field and have at least two years of postdoctoral experience. Evidence of accomplishments in both research and teaching will be essential. The successful candidate will be expected to establish an independently funded research program and participate in both the undergraduate and graduate teaching programs. Candidates seeking appointment at the Associate level will be expected to have already developed an independently funded research program. The Department is presently composed of 14 faculty members with diverse research interests in biochemistry, genetics, and microbiology supported by over \$2.5 million per year in grants. Laboratory facilities are modern and well equipped. Salary and start-up packages will be competitive. The University enrolls 11,000 students including approximately 2,500 graduate students. Laramie is located in southeastern Wyoming about 120 miles from Denver, Colorado. For additional information, see website: http:// www.uwyo.edu/ag/molecbio/mobio.html or direct questions to e-mail: uwmbio@uwyo.edu. Candidates should submit a curriculum vitae, description of research plans and teaching philosophy, and three letters of recommendation to: Faculty Search Committee, Department of Molecular Biology, University of Wyoming, Laramie, WY 82071-3944. Screening of applications will begin on September 15, 1999, and continue until a suitable candidate is identified.

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TENURE-TRACK OR TENURED FACULTY POSITION

The Department of Pharmacology, University of Illinois, College of Medicine, Chicago invites applications for a tenure-track or tenured faculty position at the ASSISTANT, ASSOCIATE, or FULL PRO-**FESSOR** level. Applicants should have a Ph.D., M.D., or both degrees, and an independent and NIH-funded research program. The department wishes to add to its strengths in vascular biology, signaling, receptor function, and biology of inflammation. Expertise in transgenic/knockout technology as an integral component of the research program is desirable. The position comes with an extensive and highly competitive start-up package, as well as renovated space. Please send a complete curriculum vitae, a brief statement of research interest, and names of three references to: Search Committee (AP001), Department of Pharmacology (M/C 868), University of Illinois at Chicago, 835 South Wolcott Avenue, Chicago, IL 60612. For fullest consideration, please submit applications by November 15, 1999. UIC is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF FLORIDA

Seeks ASSISTANT/ASSOCIATE PROFESSOR in the Department of Medicine Division of Cardiology. M.D. degree, Board-certified/Board-eligible in cardiology. A full-time tenure-track position, with expertise in echocardiography. Responsibilities will include primarily attending in echocardiography laboratory, also some consultation and inpatient responsibilities. Salary and benefits commensurate with experience. Please reply with curriculum vitae to: Janet Lewis, M.D., Associate Professor, Division of Cardiology, Box 100277, JHMHC, Gainesville, FL 32608. Recruiting deadline: July 29, 1999, anticipated start date: September 3, 1999. An Equal Opportunity/Affinnative Action Employer.

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FACULTY POSITION IN PLANT VIROLOGY AND VIRUS DISEASES

The Department of Plant Pathology, University of California, Riverside, invites applicants for an 11month tenure-track position at the ASSISTANT PROFESSOR level. The position will be available July 1, 2000, and carries a 75 percent research appointment in the Agricultural Experiment Station and a 25 percent teaching appointment in the College of Natural and Agricultural Sciences. The successful applicant will be expected to develop a well-recognized, clearly focused research program for the study of plant viruses and virus diseases. Viruses of vegetable crops and ornamental plants are probable targets for research. The appointee will contribute to graduate and undergraduate teaching and advising in the areas of expertise, which could include, in addition to virology, vector-transmission of pathogens, epidemiology, microbiology, and/or cell/molecular biology. Applicants must have a Ph.D. and have a demonstrated ability to conduct productive and creative research. Applicants should submit (1) a curriculum vitae, (2) a statement of research and teaching interests, (3) a complete list and selected reprints or preprints of publications, (4) undergraduate and graduate transcripts, and (5) letters of reference to: Dr. Allan Dodds, Department of Plant Pathology, University of California, Riverside, CA 92521-0122. Telephone: 909-787-4491; FAX: 909-787-4294; email: allan.dodds@ucr.edu. Application deadline: October 7, 1999. Additional information about the department and the position is/will be available at website: http://cnas.ucr.edu/~ppath/plantpath. html. The University of California is an Affirmative Action/ Equal Opportunity Employer.

FACULTY POSITIONS IN THE DEPARTMENT OF PATHOLOGY

Faculty positions are available at the University of Virginia Medical Center for Pathologists who wish to develop or sustain an outstanding research career. Candidates should hold an M.D. or M.D.-Ph.D. degree and have completed Residency training in anatomic or clinical pathology. Candidates should present evidence of successful competition for research grants or the background required to compete for grants. Individuals with research interests in diverse areas will be considered; however, preference will be given to those who are interested in pathobiological processes involving cell adhesion and migration or the molecular genetics of cancer. Each candidate may expect to devote the majority of his/her time to research but will be required to contribute to one of our clinical services, including hemotopathology, medical microbiology, immunopathology, molecular diagnostics, surgical pathology and cytology, and autopsy pathology. Interested candidates should send a letter describing your qualifications, a curriculum vitae, and a list of individuals who may be contacted as references to: Steven L. Gonias, M.D., Ph.D., Professor and Vice Chair, Department of Pathology, Box 214, University of Virginia Medical Center, Charlottesville, VA 22908. The University sity of Virginia is an Equal Opportunity/Affirmative Action Employer.

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The Department of Preclinical Sciences is looking for an individual to perform pharmacokinetic and metabolism studies. The candidate will have a BS/MS in biology, biochemistry, pharmaceutical sciences, physiology, or related field and three to five years' laboratory experience. A combination of the following training and skills are preferred: small animal surgery, in vitro metabolism, pharmacokinetic computer modeling, and HPLC drug analysis. Individuals who are detail-oriented, enjoy working in a team environment, and have the desire to take responsibility for a scientific project are encouraged to apply. (Job Code: N99-027-SCI)

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This position is responsible for production of materials for research, which involves cell culture, transfection, harvest and purification of the lysate through multiple steps involving precipitation, centrifugation and ultracentrifugation.

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FACULTY OPPORTUNITY MOLECULAR NEUROSCIENCE/ NEUROPSYCHIATRY

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We offer an excellent salary and a comprehensive benefits package. For consideration, please send C.V., a statement of research interests, and the names and addresses of three references to: Dr. Joseph Buxbaum, Department of Psychiatry, Box 1230, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Visit our website at: www.careermosaic.com/mountsinai We are an equal opportunity employer fostering diversity in the workplace.

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Positions are available for individuals with expertise in molecular antibody engineering and immunology to participate in an exciting research program in gene therapy for cancer, from the basic research to clinical translation. Reply with C.V., a bibliography and three letters of recommendation to: Dr. Shu-Hsia Chen, Assistant Professor, Institute for Gene Therapy and Molecular Medicine, Box 1496; Fax: 212-803-6740.

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Reply with C.V. and names and addresses of three references, to: Drs. R.F. Margolskee and M. Max, Department of Physiology and Biophysics, Box 1677; Fax: 212-849-2599.

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Professor and Chair, Department of Veterinary Pathobiology

University of Missouri-Columbia

The University of Missouri-Columbia College of Veterinary Medicine invites applications and nominations for the position of Professor and Chair of the Department of Veterinary Pathobiology. This department, with 43 faculty and 27 graduate students, is housed in newly renovated research and teaching facilities. The Research Animal Diagnostic and Investigative Laboratory and the Veterinary Medical Diagnostic Laboratory are units within the department. Candidates must be scholars of international or national stature with an earned doctorate and excellent interpersonal and communication skills. The individual selected must have the vision to deal with changing research and educational issues affecting the veterinary profession and be able to develop innovative departmental programs. The Chair reports directly to the Dean and is a member of the Executive Committee that advises the Dean and helps formulate College policy. The appointee will be charged with enhancing and promoting excellence in research and teaching and supporting the service components of the department. He/She is expected to maintain a prominent level of scholarly activity and stimulate faculty toward high scholarly achievement. A major objective of this department is to build on its high quality research programs. Preference will be given to individuals with a sustained record of extramural support and experience in developing research programs. The University of Missouri-Columbia campus offers unique opportunities for collaboration in multidisciplinary research, particularly through interactions with programs in the College of Agriculture, Food and Natural Resources and the School of Medicine. This is an exciting time for the department as faculty positions will be added to enhance multidisciplinary research over the next three years through a legislative initiative termed mission enhancement. Applicants should submit a letter of application, statement of goals, curriculum vitae, and the names and contact information of at least three references. Consideration of applications will begin September 1, 1999 and will continue until the position is filled. Nominations and applications should be sent to Dr. Kim S. Wise, Associate Dean for Research, School of Medicine and Chair of the Veterinary Pathobiology Search Committee, ATTN: Ms. Jennifer Winn, W203 Veterinary Medicine Building, College of Veterinary Medicine, University of Missouri, Columbia, MO 65211. Telephone: (573) 882-3768.

Additional information is available at http://www.cvm.missouri.edu/cvm/positions/pathobiology.html

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Your role will be to support the development and worldwide deployment of the database through working closely with Scientists across R&D. You'll use a wide variety of packages, tools and programs, so your skills will develop fast. From creating new ways of interrogating the system to training colleagues, you'll be dedicated to ensuring the database's use and usefulness are maximized.

Possibly a Biologist or Chemist, you'll have a strong interest and some experience in IT and will be ready for a change in direction. Your degree in Science or a technology-related subject will ensure you're credible with scientists and able to understand their information needs. But just as important is your personality. We're looking for a confident, outgoing individual, able to learn new skills fast and explain complex ideas clearly. You should also be eager to get involved with other areas of the team's work.

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St. Jude Children's Research Hospital, located in Memphis, Tennessee, is one of the world's premier research centers for research and treatment of catastrophic diseases in children, primarily pediatric cancers. St. Jude is a learning environment offering professional growth and diversity for the research technologist where biomedical education extends beyond the laboratory and clinical experience. Workshops, seminars and lectures are regularly presented by both the St. Jude faculty and distinguished visiting investigators. Our non-faculty research staff career ladder provides several levels of promotion and financial compensation for talented and motivated technologists to advance in their field. Experienced technologists may assist the principal investigator by performing research experiments, developing new procedures, participating in the publication of research results, managing laboratory operations and training laboratory personnel. Opportunities are available in the requiring 3+ years laboratory experience: • Animal Resource
Center • Hematology Oncology • Cell and Gene Therapy
• Experimental Hematology • Genetics • Immunology
• Molecular Pharmacology • Pharmaceutical Sciences

For additional information, please refer to our website:

www.stjude.org/hr

Resumes may be sent to:

St. Jude Children's Research Hospital **Human Resources Dept. SC326** 332 N. Lauderdale, Memphis, TN 38105

Fax: 901-495-3123 E-mail: virgil.holder@st.jude.org

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TENURE TRACK POSITION IN CANCER BIOLOGY AT STANFORD UNIVERSITY

The Division of Radiation Biology of the Department of Radiation Oncology is seeking applicants for a tenure-track position at the ASSISTANT PROFESSOR level. We seek outstanding applicants with proven research records in the application of DNA array technology, transgenic knockout mouse technology or protein biochemistry to study the responses of cells to stress with an emphasis on those caused by ionizing radiation and/or anticancer therapies or the microenvironment of solid tumors. Criteria for selection include future research direction, the potential to secure extramural funding and relationship of proposed research program to existing faculty interests in molecular aspects of cellular stress to hypoxic conditions, determinants of resistance of cancers to treatment, and DNA damage and repair following ionizing radiation. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Applicants should submit curriculum vitae, a one page synopsis of research plan and names of three references to: Dr. Amato J. Giaccia, Department of Radiation Oncology, Mayer Cancer Biology Research Laboratory, Rm. GK220A, Stanford University School of Medicine, Stanford, CA 94305-5468.

Associate/Staff Scientist-Antimicrobials

DuPont Pharmaceuticals Company will be a Pharmaceutical Industry leader: A multinational, multibillion dollar, researchbased Company recognized worldwide for superior service to customers and contributions to mankind. Our efforts will be at the leading edge of science, medicine and technology in bringing novel solutions to major unmet medical needs. We currently have an Associate/Staff Scientist - Antimicrobials opportunity at our facilities in Wilmington, DE.

The ideal candidate will assist in developing biochemical and microbiological assays to examine the mechanism of action of antibacterial agents and identify/evaluate novel agents. A BS/MS in Molecular Biology or Biochemistry is required, as well as a working knowledge of microbial agents, microbiology and biochemistry, plus laboratory experience in molecular biology and protein biochemistry/enzymology. Good verbal and written communication skills are necessary to succeed in this role.

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-SD-EB, E400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer, M/F/D/V.



DuPont Pharmaceuticals Company



MAYO CLINIC POSTDOCTORAL FELLOWS AND TECHNOLOGISTS LENTIVIRUS RESEARCH, GENE THERAPY

Postdoctoral scientist and technologists required for a new lentiviral research initiative within the Mayo Clinic Molecular Medicine Program, a recently established program with several groups of virologists working collaboratively to develop clinically useful gene transfer systems and to study viral pathogenesis. Successful candidates will join the group of Dr. Eric M. Poeschla to develop novel feline immunodeficiency virus (FIV)- and HIV-based lentiviral vector systems or to conduct innovative studies of HIV pathogenesis. Projects to be conducted in new, state-of-the-art virology research facilities include enhancement of lentivector system efficiency and safety, creation of packaging cell lines, testing in animal models, including gene-altered hematopoietic stem cell reconstitution, improving strategies to achieve sustained gene expression in vivo, and studies of viral/cellular dynamics in HTV disease and chemokine receptor use by human and animal lentiviruses. Molecular virological and/or HIV research background desirable but motivated applicants with advanced molecular biology backgrounds are invited to apply. Experience in working with hematopoietic progenitor cells in immunodeficient mouse models is sought for one individual to be hired. Excellent salary benefits commensurate with experience synergize with low cost of living and pleasant, small city living environment. Send curriculum vitae and names of three references to:

> Dr. Eric Poeschla Molecular Medicine Program & Division of Infectious Diseases-Guggenheim 18 Mayo Clinic 200 1st St. SW Rochester, MN 55905 e-mail: emp@mayo.edu

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



POSTDOCTORAL RESEARCH POSITIONS NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES NATIONAL INSTITUTES OF HEALTH RESEARCH TRIANGLE PARK, NORTH CAROLINA

Postdoctoral research positions are available in the Division of Intramural Research at the National Institute of Environmental Health Sciences (NIEHS), NIH, in Research Triangle Park, North Carolina. Areas of research and the hiring scientist for each include:

Activation of Transcription in Chromatin Trevor Archer, Ph.D. (archer1@niehs.nih.gov)

Biostatistical Methods in Genetics

Clarice Weinberg, Ph.D. (weinberg@niehs.nih.gov)

Cell Cycle Checkpoint Signaling Mechanisms Richard S. Paules, Ph.D. (paules@niehs.nih.gov)

Cyclooxgenases, NSAID s and Cancer Robert Langenbach, Ph.D. (langenb1@niehs.nih.gov)

Effects of Supplemental Boron on Bone Strength in Rats and People Robert Chapin, Ph.D. (chapin@niehs.nih.gov)

Free Radical Metabolism

Ronald Mason, Ph.D. (mason4@niehs.nih.gov)

Genetic and Environmental Epidemiology of Respiratory Illness Stephanie London, M.D., Dr.P.H. (london2@niehs.nih.gov)

Genomic Instability in Vitro and in Vivo Kenneth Tindall, Ph.D. (tindall@niehs.nih.gov)

Glucocorticoid and Orphan Nuclear Receptor Action John Cidlowski, Ph.D. (cidlowski@niehs.nih.gov)

Ion Channel Physiology Jerrel Yakel, Ph.D. (yakel@niehs.nih.gov)

Mitochondrial DNA Replication
William Copeland, Ph.D. (copelan1@niehs.nih.gov)
Mechanisms by Which Organisms Produce Mutations
Roel Schaaper, Ph.D. (schaaper@niehs.nih.gov)

Mechanisms of Cell Adhesion and Migration Steven Akiyama, Ph.D. (akiyama@niehs.nih.gov)

Mechanisms of Regulation of Apoptosis John Cidlowski, Ph.D. (cidlowski@niehs.nih.gov)

Microarray Technology in Environmentally Associated Diseases Cynthia Afshari, Ph.D. (afshari@niehs.nih.gov)

Molecular Biology L.H. Lazarus, Ph.D. (lazarus@niehs.nih.gov)

Molecular Neurobiology J.S. Hong, Ph.D. (hong3@niehs.nih.gov)

Pediatric Epidemiology
Walter Rogan, M.D. (rogan@niehs.nih.gov)
Regulation of Signal Tranduction Pathways by Adaptor Proteins
John O Bryan, Ph.D. (obryan@niehs.nih.gov)

Renal Secretory Transport Mechanisms
John Pritchard, Ph.D. (pritcha3@niehs.nih.gov)

Role of Signal Transduction in Tumor Cell Adhesion

John Roberts, Ph.D. (roberts1@niehs.nih.gov)

Signal Transduction by Inositol Phosphates Stephen Shears, Ph.D. (shears@niehs.nih.gov)

Stress Induced Signaling Pathways
Elizabeth Murphy, Ph.D. (murphy1@niehs.nih.gov)

Transgenic Molecular Biology
Raymond Tennant, Ph.D. (tennant@niehs.nih.gov)

Must possess Ph.D., M.D. or equivalent with no more than five years of postdoctoral experience. For further information on these positions, access our Human Resources website http://www.niehs.nih.gov/omhrmb/vacancy/postdoc.htm http://dir/niehs.nih.gov provides laboratory information. To apply, submit a cover letter, curriculum vitae and the names of three references to the hiring scientist at the address below.

NIEHS, P.O. Box 12233, Research Triangle Park, NC 27709-2233

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Faculty Positions Department of Biology University of Pennsylvania

The Department of Biology expects to make two tenure track appointments, one in Ecology and one in Plant Biology.

Ecology: we are seeking a broadly trained ecologist whose research has implications for understanding large scale processes and patterns in ecology. The ideal candidate will complement and interact with existing faculty whose strengths lie in population and community ecology and evolutionary biology.

Plant Biology: individuals using molecular, genetic, biochemical and/or biophysical approaches to study the mechanism(s) of basic plant processes are encouraged to apply. The successful candidate will also become an active member of the Plant Science Institute.

Candidates will be expected to teach at the undergraduate and graduate levels in addition to maintaining a vigorous, independent research program. While we expect that the two appointments will be at the Assistant Professor level, outstanding senior applicants will also be given serious consideration. Applicants should send a curriculum vitae, at least three letters of recommendation, and up to three reprints or manuscripts to:

Chair, Ecology or Plant Biology Search Committee Department of Biology University of Pennsylvania Philadelphia, PA 19104-6018

Review of applications will begin on Oct. 1, 1999. Further information on the Department of Biology can be found at www.sas.upenn.edu/biology

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

Women and minorities are encouraged to apply.



Incyte Bioinformatics Software Development

Incyte Pharmaceuticals, Inc. is a leading provider of an integrated platform of genomic technologies designed to aid in the understanding of the molecular basis of disease. Incyte's platform includes database products, genomic data management software tools and related reagents and services, which Incyte provides to the pharmaceutical and biotechnology industries to assist their drug discovery and development efforts.

Senior Director of Software Development (US)

This highly visible position reports to the International VP of Software Development and is responsible for the deployment and development of a major multidisciplinary IS/IT function to support Incyte's business and marketing

You will play a lead role in managing and developing the required resources. skills and technologies within the company to deliver Incyte's strategic and operational goals. As a senior member of Incyte's Software Development management team, you will have a key role in the development and delivery of Incyte's Software Business program and other technology based product lines as well as providing software support for internal discovery, production and business processes

We are looking for an individual with strong project and resource management skills and experience in software development, with a track record of success in delivering high-quality projects and products within defined budgets and timelines. If you are an innovator, have strong motivational and influencing skills, can work in a highly creative and demanding environment and have the relevant background we would like to hear from you.

To apply for this opportunity please mail/fax your resume to:

Incyte Pharmaceuticals, Inc. 3174 Porter Drive Palo Alto, CA 94304 Fax: 650-845-4176 Email: employ@incyte.com Web: www.incyte.com

DISTINGUISHED CHAIR FACULTY POSITION CENTER FOR IMMUNOLOGY

The University of Texas Southwestern Medical Center at Dallas seeks to fill a Distinguished Chair faculty position in the Center for Immunology. We seek a scientist with an M.D. and/or Ph.D. degree(s) who has achieved international recognition in immunology. In addition, the appointee must have an established record mentoring scientists in training, and strong NIH-funded research programs. Extensive resources are available to support the transition of the appointee to UT Southwestern, and to foster the growth of the candidate's research program within the Center for Immunology. Researchers in all areas of immunology are encouraged to apply; however, particular consideration will be given to scientists using animal models to investigate human disease processes. The Center for Immunology is in the process of filling multiple faculty positions and the appointee will play a key role in the completion of this recruiting

Please submit current curriculum vitae and summary of proposed research programs and interests, and the names of four references to: Dr. Edward Wakeland, Director—Center for Immunology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9093. E-mail: edward.wakeland@email.swmed.edu.

All applications must be received by September 15, 1999.

Equal Opportunity Employer.

OAKLAND UNIVERSITY ENVIRONMENTAL CHEMISTRY

The Department of Chemistry invites applications for a full-time, tenure-track position at the ASSIST-ANT or ASSOCIATE PROFESSOR level starting winter or fall 2000. A Ph.D. in chemistry, biochemistry, or an appropriately related environmental area is required. The successful candidate will be required to develop a strong, externally funded research program in environmental chemistry compatible with our Ph.D. in health and environmental chemistry and B.S. in environmental health. Research areas of interest include, but are not limited to, chemical toxicology, environmental analysis, and study of chemical fates in the environment. Teaching assignments will be mainly in environmental chemistry, e.g., toxicology, at the undergraduate and graduate levels. Submit curriculum vitae, a brief description of research plans, copies of transcripts, and arrange to have three letters of recommendation sent to: Professor P. Tomboulian, Department of Chemistry, Oakland University, Rochester, MI 48309-4477. Review of applications will commence September 1, 1999, and will continue until an applicant is chosen. Inquiries to e-mail: envsearch@ouchem.chem.oakland.edu. Oakland University is an Equal Opportunity/Affirmative Action Employer.

FACULTY APPOINTMENT IN MOLECULAR IMMUNOLOGY Barbara Davis Center for Childhood Diabetes University of Colorado Health Sciences Center

A position is available at the ASSISTANT/ASSOCIATE PROFESSOR level to develop a research program in molecular immunology preferably relating to the pathogenesis of type I diabetes and gene therapy approaches to prevention of the disease.

Candidates should have a Ph.D. or M.D., relevant postdoctoral experience, and a commitment to basic research. Applications to: Professor J. C. Hutton, Research Director, Barbara Davis Center, 4200 East 9th Avenue, Box B-140, Denver, CO 80262 USA should include a curriculum vitae, statement of research and names of three referees. E-mail: carrie.john@uchsc.edu. See websites: http://www.uchsc.edu/misc/diabetes/bdc.html; http://www.nchsc.edu/misc/diabetes/bdc.html; http://www.nchsc.edu/sm/immuno/imunno.html. UCHSC is committed to Equal Opportunity and Affirmative Action.

POSITIONS OPEN

ASSISTANT PROFESSOR OF FORESTRY WOODY PLANT NUTRITION

The Department of Forestry at Michigan State University is seeking applicants for a full-time (12-month) tenure-track, Assistant Professor of forestry position with a specialization in tree nutrition (60 percent research, 40 percent teaching). The successful applicant will be expected to build a nationally recognized scholarly research program, as demonstrated in research grants, publications in leading refereed journals, and graduate student recruitment and training, in the field of soil-tree nutrient relations, with a focus on intensive tree production systems, including Christmas tree production; develop and teach a graduate-level course in woody plant nutrition, teach Forestry 220 (Trees and the Global Environment), and teach Forestry 202 (Introduction to Forestry); be actively involved in M.Sc. and Ph.D. graduate education; and participate in international research activities as appropriate. At least one degree in forestry and a Ph.D. in plant nutrition, plant physiology, forest soils, or a related area are required. Preference will be given to candidates with a B.Sc. or M.Sc. in an accredited forestry curriculum. Postdoctoral experience, a record of success in soliciting research grants, teaching experience, and publications in leading refereed journals are desirable.

Applications will be accepted until September 30, 1999, or until the position is filled. A complete application will consist of a letter of intent, curriculum vitae, and four letters of reference. Send applications to:

Melvin R. Koelling, Chair Woody Plant Nutrition Search Committee Department of Forestry Michigan State University East Lansing, MI 48824-1222

Telephone inquiries can be directed to: The Search Committee Chair, Telephone: 517-355-0096.

MSU is an Affirmative Action/Equal Opportunity Employer. Persons with disability have the right to request and receive reasonable accommodation. Michigan State University is comnitted to building a diverse faculty, so candidates from underrepresented groups are especially encouraged to apply.

MOLECULAR PATHOGENESIS UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Molecular Biology and Biochemistry invites applications for an ASSISTANT PROFESSOR tenure-track position in the general area of molecular pathogenesis. This position is in conjunction with a new campuswide initiative to enhance immunology at UCI. Applicants with a research program in areas of protein processing and MHC presentation, regulation of molecular signaling in the innate and adaptive immune response, or the mechanisms of cell death/apoptosis are particularly encouraged to apply. Successful applicants are expected to establish an independent, funded research program and participate in teaching at the undergraduate and graduate levels. Appointment at a higher level may be considered commensurate with qualifications. Please submit a curriculum vitae, summary of research interests, and names and addresses of three references by October 1, 1999, to: Search Committee, Department of Molecular Biology and Biochemistry, 3205 Biological Sciences II, University of California, Irvine, CA 92697-3900.

UCI is an Equal Opportunity Employer committed to excellence through diversity.

FULL-TIME FACULTY POSITIONS available in the Department of Pathology at the Wayne State University School of Medicine. Faculty rank to be commensurate with experience and qualifications. Responsibilities will include teaching, research, and hospital service work if applicable. M.D. or Ph.D. required. M.D's must be Board-certified or Board-ligible, licensable in the state of Michigan, and exhibit scholarship potential. Send curriculum vitae and three references to: Department of Pathology, Wayne State University, School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201. An Equal Opportunity/Affinnative Action Employer.

POSITIONS OPEN

Applications are invited for a tenure-track position at the rank of **ASSISTANT** or **ASSOCIATE PRO**-FESSOR in the Department of Physiology and Cell Biology of The Ohio State University College of Medicine and Public Health. The successful candidate will be given a joint appointment in the Heart and Lung Institute under the Directorship of Pascal J. Goldschmidt, M.D. We are seeking an individual with a strong research background in cardiac excitation-contraction coupling as studied with patch clamp techniques, confocal microscopy, and other state-ofthe-art approaches. Basic studies of ion channels and other components of EC coupling in cardiomyocytes, transfected oocytes, or model cell lines will be encouraged. Collaborative studies with other members of the Heart and Lung Institute and the Department of Physiology and Cell Biology to elucidate the basis for altered EC coupling in transgenic, spontaneous, and experimentally induced heart failure models currently under investigation at this institution will also be encouraged. Applications will be accepted until October 1, 1999, or until a suitable candidate has been accepted. Send a curriculum vitae, a brief description of research interests, and names of three references to: Pascal J. Goldschmidt, M.D., Chair, Search Committee, c/o Department of Physiology and Cell Biology, 302 Hamilton Hall, 1645 Neil Avenue, Columbus, OH 43210-1218. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to

PROVIDENCE COLLEGE

ASSISTANT PROFESSOR of biology. Applications are invited for a tenure-track position in the Biology Department at Providence College beginning September 2000. Applicants are required to have a Ph.D., to establish a research program involving undergraduates in their respective fields, and to apply for extramural funding. The applicant should have a strong commitment to undergraduate education and be willing to foster a collaborative atmosphere among students and faculty in keeping with the Mission of the College.

The Department is seeking an Ecologist with an emphasis in animal behavior. The successful applicant will teach ecology and animal behavior for majors. Other responsibilities include the development of new courses for majors and/or non-majors.

Providence College is a Roman Catholic, four-year, liberal arts college conducted under the auspices of the Dominican Friars. Applicants should submit curriculum vitae, transcripts, a statement of teaching philosophy and research interests, and three letters of recommendation by August 30, 1999, to: Dr. Michael S. Zavada, Chairperson, Biology Department, Providence College, Providence, RI 02918-0001. For additional information about the Biology Department and Providence College refer to website: http://www.providence.edu. Providence College is an Affinnative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.

Lymphoma immunobiology FACULTY POSI-TION. The Department of Internal Medicine at the University of Nebraska Medical Center (UNMC) is seeking Ph.D., M.D., or M.D.-Ph.D. applicants for a **TENURE-TRACK** position in the area of lymphoma immunology and vaccine laboratory research. Academic rank and salary will depend upon qualifications. Successful applicants will be able to interact closely with clinical and translational researchers that are internationally recognized for lymphoma research. Opportunities for collaborations with other researchers at UNMC in immunobiology, molecular biology, and transplantation also exist. Applicants should send their curriculum vitae, names of three references, and a letter detailing their research goals to: Julie M. Vose, M.D., Professor and Vice Chair, University of Nebraska Medical Center, Department of Internal Medicine, 983332 Nebraska Medical Center, Omaha, NE 68198-3332. UNMC is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

National Institutes of Health National Cancer Institute Division of Basic Sciences

Associate Director, Office of Laboratory Animal Resources Interdisciplinary Position (Supervisory Biologist, GS-401-15 or comparable, Supervisory Veterinary Medical Officer, GS-701-15)

NCI-99-0315

Opening Date: July 22, 1999 Closing Date: September 3, 1999

The National Cancer Institute (NCI) is recruiting an Associate Director to head the Office of Laboratory Animal Resources (OLAR) located on the National Institutes of Health (NIH) campus in Bethesda, Maryland. Candidates must have experience in oversight and direction of laboratory animal care and use in research programs. The incumbent serves as the NCI Animal Care and Use Program director and Director of OLAR. The selected candidate develops and implements policies and procedures to ensure the health, welfare and genetic integrity of laboratory animals. The incumbent represents NCI on various NIH, Public Health Service (PHS), or other government committees, task forces or meetings regarding the care and use of laboratory animals in biomedical research and testing. He/she maintains contact with cancer research investigators, management officials, and the veterinary community at national and international levels.

Candidates must also have relevant experience in administration and management of an animal care and use program including planning and directing the program and evaluating its effectiveness. Experience in establishing priorities and allocating resources is also essential.

The candidate must be either a U.S. citizen, a citizen of a treaty allied country, or a nonresident alien with a valid work visa. Total annual compensation will be commensurate with education and experience.

BASIC QUALIFICATIONS/SALARY RANGE AND BENEFITS: Applicants must meet the basic experience and educational qualifications for a Biologist or Veterinary Medical Officer. In order for 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) MANDATORY Knowledge, Skills and Abilities (KSAs), as listed in Career Here Vacancy Announcement. Benefits include health and life insurance, retirement, paid holidays, vacation and sick leave.

APPLICATION PROCEDURES: The NCI Career Here Vacancy for this position contains complete application procedures and lists all mandatory information which you must submit with your application. To obtain the recruiting bulletin, call **1-800-728-JOBS** (local calls: 301-594-2953). When prompted, enter the "FAX ID Number" 1819 for NCI-99-0315. 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 INSTITUTES OF HEALTH, NATIONAL CANCER INSTITUTE, HUMAN RESOURCE AND CONSULTING BRANCH,

6120 Executive Boulevard, MSC 7211, Executive Plaza South, Suite 550, Rockville, Maryland 20852-7211

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Since 1990, the Whitehead Institute for Biomedical Research has ranked among the top three research institutions in the world in genetics and molecular biology. As an integral part of the MIT teaching community, we attract the brightest scientists with promising research agendas, and then give them the freedom to pursue their own dreams. The results are nothing short of extraordinary. Join us.

Biocomputing Applications Specialist

We are looking for an energetic, innovative, computer savvy biologist to support scientists at the Whitehead Institute in the use of molecular biology software for Macintosh and UNIX systems. The Whitehead Institute is a world-renowned basic research Institute with 20 independent research laboratories. Responsibilities of the Specialist include recommending, supporting and installing software; instructing scientists in the use of DNAStar Lasergene, MacVector, GCG and similar programs; maintaining and administering a Web Server for biocomputing; and assisting scientists in developing genomic databases and analyzing gene expression and biological sequence data. Requires a minimum of an MS degree in Biology or related discipline or equivalent experience and a minimum of one to two years of related experience. Must be flexible and demonstrate good interpersonal skills, and have a background in utility programming (C Shell, Perl) in a UNIX environment.

We offer excellent salaries, generous benefits (including tuition reimbursement and T-pass discount), interaction with MIT community, state-of-the-art research facilities, and a convenient Kendall Square location.

Please send resumes to: Whitehead Institute for Biomedical Research, Human Resources Dept. Ref. SC:7999, Nine Cambridge Center, Cambridge, MA 02142. Equal Opportunity Employer.

We have many more Administrative, Computing, and Research opportunities.

Visit our web site: www.wi.mit.edu.



Postdoctoral Position Molecular Immunology

An Intramural Research Training Award (IRTA) is available immediately to investigate the molecular mechanisms that underlie the etiology and susceptibility to a number of intraocular inflammatory diseases of infectious or autoimmune origin. Emphasis will be on cytokine-inducible signaling pathways of ocular cells. Prior experience in immunological methods, cell culture, gene regulation, parasitology or virology is desirable. Candidates should have a Ph.D. or M.D. with less than 5 years of postdoctoral experience and must be U.S. citizens or permanent residents. salary range is from \$27,500-\$38,000 depending on postdoctoral experience. Deadline date to receive applications is August 20, 1999. Send a curriculum vitae and names of three references to:

> Charles E. Egwuagu, MPH, Ph.D., Laboratory of Immunology National Eye Institute National Institutes of Health Building 10, Room 10N116 10 Center Dr. MCS 1857

Bethesda, Maryland 20892-2730. Fax: (301) 480-3914; email: emeka@helix.nih.gov

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

RESEARCH ASSISTANT PROFESSOR. To support any of several areas of interest to the Department. These are (1) functional studies of protein prenylation; (2) the transcriptional control of lipid biosynthesis; (3) signal transduction pathways for apoptosis; (4) mechanism of action of macrolide antibiotics. This is a "hard money" position with a starting salary of \$40,000 to \$50,000 per year (depending on experience) plus benefits. Opportunity will also be provided for the development of an independent research program. Experience with standard molecular biological techniques and protein purification is required. The location of the James H. Quillen College of Medicine is Johnson City, Tennessee, a pleasant community situated between the Blue Ridge and Great Smoky Mountains. The region offers numerous opportunities for outdoor recreation. Review of application will begin on January 1, 2000, and will continue until the position is filled. Send a description of current research, representative reprints of published work, a curriculum vitae, and names and addresses of three references to: Dr. Michael Sinensky, Chair, Biochemistry and Molecular Biology, East Tennessee State University, Box 70581, Johnson City, TN 37614-0581. ETSU is an Affirmative Action/ Equal Opportunity Employer. Women and minorities are encouraged to apply.

PHARMACOLOGIST. The Department of Veterinary Physiology, Pharmacology, and Toxicology is seeking a Pharmacologist to fill a tenure-track position at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR level. The position requires a D.V.M. or equivalent degree and/or a Ph.D. in pharmacology or a related science. At least two years of postdoctoral research experience is required. The duties and responsibilities of the position include teaching pharmacology to veterinary students in the didactic and clinical setting, mentoring graduate students and teaching pharmacology at the graduate level, and developing/maintaining an extramurally funded research program in any area that complements the objectives of the department. Interested applicants should send a letter of interest, résumé, and three letters of reference to: Dr. Charles R. Short, Department of Veterinary Physiology, Pharmacology, and Toxicology, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803. Applications will be accepted until October 1, 1999, or until a candidate is selected. LSU is an Equal Opportunity

MOLECULAR GENETICIST/MOLECULAR BIOLOGIST with an interest in atherosclerosis, vascular biology, or cardiovascular disease.

The Research Institute of the Palo Alto Medical Foundation is seeking an individual with a Ph.D. or M.D., and postdoctoral training in molecular genetics/molecular biology, and an interest in applying this to problems of relevance to atherosclerosis, vascular biology, lipid metabolism, or other related aspects of cardiovascular disease. The individual would join a group of four other independent Investigators in this area. They will be provided with sufficient laboratory and office space in a modern new facility to establish an independent program that can attract extramural support. There are excellent opportunities for collaboration, both in the existing group, and with Investigators in nearby institutions. Salary and benefits are competitive.

Send curriculum vitae to: Allen Cooper, M.D., Director, Research Institute, Palo Alto Medical Foundation, 860 Bryant Street, Palo Alto, CA 94301. The Research Institute of the Palo Alto Medical Foundation is a 50-year-old, nonprofit institute on with stable intramural funds and is an Equal Opportunity Employer.

ASSISTANT PROFESSOR. Systematic entomology, Department of Entomology, University of Massachusetts. See website: www.umass.edu/ent/for more details. Send application to: Dr. David N. Ferro, Professor and Chair, Department of Entomology, 102 Fernald Hall, University of Massachusetts, Amherst, MA 01003-2410 USA. FAX: 413-545-2115.

POSITIONS OPEN





The USDA, Agricultural Research Service (ARS), Food Safety and Health Research Unit, Western Regional Research Center, Albany, California is accepting applications for the position of RESEARCH MI-CROBIOLOGIST or PLANT PATHOLOGIST, (GS-11/12, depending on experience; \$42,673 to \$66,488, plus benefits). The incumbent will be a Permanent Scientist in a laboratory performing research within a broad project addressing the biology of bacterial human pathogens in manure. The overall project involves the study of the mechanisms involved in the introduction, survival, detection, identification, and virulence of human pathogens in manure, compost, treated wastewater, and irrigation water. The incumbent will be part of a project to develop surrogate strains and methods for monitoring the transfer of microbes under simulated field conditions and for testing innovative new strategies for limiting the presence and virulence of pathogens in food and manure. The incumbent defines approaches, and plans experimental procedures, on aspects of the project involving (1) development of new methods for collecting, culturing, identifying, and tracking microorganisms present in manure, wastewater, compost, and air sambles; (2) identification of genes encoding factors related to the presence of pathogens in a plant environment and in manure; (3) identification of nonpathogenic microbes that enhance the kill or decreased virulence of human pathogens in manure or compost. Degree required in microbiology, plant pathology, or related scientific disciplines plus a graduate degree-Ph.D. or equivalent Doctoral degree preferred. Or one year of specialized experience in the study of microbes in manure/compost. Candidates must be a U.S. citizen. A complete copy of the vacancy announcement and where to apply can be found at website: http:// www.ars.usda.gov/afm/hrd/resjobs/index.html; select announcement ARS-D9W-9363; or contact Personnel, Telephone: 510-559-6014. Closing date for applications is August 30, 1999. For information, contact: Stacey R. Pascoe, USDA, ARS, Western Regional Research Center, Albany, CA 94710. Telephone: 510-559-5610; e-mail: spascoe@pw. usda.gov. USDA/ARS is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.

CLINICAL RESEARCHER

Join the team at Woman's Hospital and enjoy the challenge of a rewarding career, attractive compensation, outstanding benefits, and an extraordinary work environment. We are currently hiring a full-time Clinical Researcher in the Woman's Health Research Institute. The position requires a Ph.D. with an established research record in an area of women's health such as menopause, perimenopause, and premenstrual syndrome physiology, hormone replacement therapy, or bone physiology. Record of funding or potential to procure funding is preferred. Knowledge of statistics and research design is preferred.

To apply, send résumé to:

Woman's Hospital Human Resources Department P.O. Box 95009 Baton Rouge, LA 70895-9009 FAX: 225-924-8646

Equal Opportunity Employer

POSTDOCTORAL/RESEARCH ASSOCIATE position. Molecular cytogenetist. Ph.D. to study etiology of hormonally related cancers. Experience in mammalian tissue culture, molecular biology, karyotyping, CGH, FISH. Knowledge of Vysis Workstation useful. Proficiency in English, spoken and written, is essential. Submit curriculum vitae and list of three references with telephone numbers to: Dr. Jonathan J. Li, Kansas Cancer Institute, Kansas University Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66009. FAX: 913-588-4740; e-mail: jli1@kume.edu.

POSITIONS OPEN

ASSISTANT SCIENTIST AQUATIC ECOSYSTEM ECOLOGY Joseph W. Jones Ecological Research Center, Ichauway

The Joseph W. Jones Ecological Research Center at Ichauway invites applications for the position of Assistant Scientist in aquatic ecosystem ecology. The individual will be expected to develop a field-oriented research program in coastal plain wetlands, riparian zones, and riverine ecosystems from both internal and external funding sources. Applications from individuals studying the contribution of biogeochemical and/ or microbial processes to the structure and function of aquatic ecosystems are encouraged. Experience or interest in restoration ecology desirable. The individual must cooperate in multidisciplinary long-term research programs with other Center scientists and contribute to conservation/education programs. Responsibilities include research (60 to 70 percent) and education (30 to 40 percent), and adjunct university appointments will be encouraged and facilitated. Qualifications include a Ph.D. in ecology, biological sciences, or a related field. Preference will be given to candidates with postdoctoral experience, strong communication skills, experience with acquiring extramural grants, and research experience combining both basic and applied perspectives. The position will be available January 1, 2000. The Joseph W. Jones Ecological Research Center is an independent institution funded by the Robert W. Woodruff Foundation. The center is located at Ichauway, a 29,000-acre ecological reserve in southwest Georgia with 26 miles of two river systems, 16,000 acres of longleaf pine forests, and 900 acres of limesink wetlands. The objective of the Center is to develop a program of excellence in ecology and natural resource management that includes research, education, and conservation goals. Compensation package is competitive and commensurate with experience, including a benefits and 403b retirement (VALIC) program. Letters of application, résumés, and names of three references should be mailed to: Dr. Stephen W. Golladay, Chair Aquatic Ecologist Search Committee, J. W. Jones Ecological Research Center, Route 2 Box 2324, Newton, GA 31770. Screening of applications will begin September 1, 1999, and continue until the position is filled. The J. W. Jones Ecological Research Center is an Equal Opportunity Employer.

PRINCIPAL INVESTIGATOR POSITIONS

Southeast Poultry Research Laboratory, Agricultural Research Services, USDA has two permanent full-time positions available for Ph.D. or Ph.D.-D.V.M. scientists. The first position is for a MOLEC-ULAR BIOLOGIST/GENETICIST with experience in microbiology, molecular biology, biochemistry, or genetics. The incumbent will utilize modern molecular approaches to conduct basic and applied research examining Salmonella enteritidis ecology The second position is for an IMMUNOLOGIST/ VIROLOGIST with experience in immunology, virology, microbiology, or molecular biology. The in-cumbent will conduct basic and applied research on the immunologic aspects of avian influenza and New-castle disease virus. The ideal candidates will have a Ph.D. or Ph.D.-D.V.M. and postdoctoral research experience with evidence of recent peer-reviewed publications. Southeast Poultry Research Laboratory is a rapidly growing, dynamic research laboratory with over 18 scientists forming a diverse interdisciplinary team working on established and emerging disease threats to the U.S. poultry industry. Salary commensurate with experience (\$47,891 to \$87,489). United States citizenship required. For further information on the research programs and/or positions contact by telephone or by mail: Dr. David Swayne, 934 College Station Road, Athens, GA 30605. Telephone: 706-546-3434. For further information of application procedures, contact: Ms. Genell Powers, Telephone: 706-546-3029. Applications must be postmarked by August 2, 1999. The USDA is an Equal Opportunity Employer and Provider.





The Global Environment: Invitation for RITE Research Proposals

Research Institute of Innovative Technology for the Earth (RITE) is inviting basic research proposals dealing with global environmental problems. Also, research proposals deemed to contribute significantly to the resolution of global environment problems will be supported by RITE in the form of entrusted research.

1. Category of Research

Basic research aimed at the development of innovative technologies, which will contribute to the solution of global environmental problems.

2. Themes of Research

- [A] Research concerning carbon dioxide, methane and other greenhouse gases considered to be the primary causes of global warming:
 - 1) Efficient separation, recovery, disposal, re-use etc. of greenhouse gases.
 - 2) Innovative process technologies which limit greenhouse gas generation.
 - 3) Research concerning enhancement of CO₂ sinks (e.g. ocean sink, underground storage and reforestation through biotechnology).
- [B] Research on other technologies concerning global environmental problems as follows:
 - 1) Control of the generation and widespread release of chemical substances, apart from the greenhouse gases mentioned in [A], which are seriously detrimental to the environment, or detoxification of those substances.
 - 2) Substitutes for the chemical substances mentioned above.
 - 3) Recycling and effective utilization of materials.

3. Number of Research Proposals to be Accepted

The number of research proposals to be accepted will be determined after the governmental budget for FY 2000 has been confirmed. Thirteen new research proposals have been accepted for FY 1999.

4. Research Expenses for Entrusted Research

Up to 10 million Japanese yen will be allocated for each research proposal, although the entire cost of research proposal may not be covered by RITE. Research expenses distributed for the research proposals accepted in FY 1999 ranged from 2.5 million to 7.5 million Japanese yen per research proposal, with an average of 6.04 million yen.

5. Deadline for the Submission of Applications

Applications must be received by RITE no later than October 29, 1999. *Attention: Applications received post deadline will be returned unprocessed.

6. Period of the Entrusted Research

Period of the entrusted research will be from April, 2000 to March, 2001. If continuation is deemed necessary, however, RITE may entrust for the next year.

7. Qualified Research Participants

Individuals of groups engaged in research activities at research institutions etc. are eligible. The applicants' citizenship or proposed site for the research will not be considered as criteria for selection.

8. Application Procedure

Applicants are asked to contact the RITE Section (as below) for further information on documents to be submitted and the prescribed form thereof. Facsimile transmission is preferred for speed of communication. Please include relevant Tel. and Fax. numbers with requests.

Research Proposals Reception Section Research Planning Department

9-2 Kizugawadai, Kizu-cho, Soraku-gun, Kyoto, 619-0292 JAPAN

TÉL: +81-774-75-2302 FAX: +81-774-75-2314 Internet home page (URL): http://www.rite.or.jp/



Virginia Commonwealth University

MOLECULAR BIOLOGIST IN DNA REPAIR AND SIGNAL TRANSDUCTION

The Departments of Radiation Oncology (http://views.vcu.edu/mcvro), Pharmacology and Toxicology, and the Massey Cancer Center at the Medical College of Virginia, Virginia Commonwealth University, invite outstanding

applications for a tenure-track faculty position as Assistant/ Associate Professor. The successful applicant, with a Ph.D. and/or M.D. degree and several years of postdoctoral experience, is expected to develop an independent and extramurally funded research program, to develop research collaborations with other members of the program and to teach postdocs, medical residents, and graduate students. The successful applicant is expected to complement a highly interactive, multidisciplinary program that investigates the molecular mechanisms of signal transduction, cell proliferation, and apoptosis underlying tumor radioresistance, and applies novel approaches to radiation treatment using drugs and gene therapeutic tools. Applicants with interests in DNA repair, signal transduction, and cellular redox effects are particularly encouraged to apply. Applications should include a CV, reprints of publications, a statement of research plans, and three letters of recommendation. This material should be sent by October 15, 1999, to: Kristoffer Valerie, Ph.D., Department of Radiation Oncology, Medical College of Virginia, Virginia Commonwealth University, Richmond,

VCU is an Equal Opportunity / Affirmative Action Employer.



ASSOCIATE INVESTIGATOR

Department of Experimental Hematology/ Transplantation and Gene Therapy Program

St. Jude Children's Research Hospital, located in Memphis, TN is looking for an Associate Investigator to utilize unique, advanced skills in achieving the highest research goals. You will develop new experimental procedures and publish research results; initiate and conduct independent experiments requiring no supervision. This position becomes available September 1, 1999. Requirements include a Ph.D. Degree plus five years of postdoctoral experience as well as expertise in molecular biology (PCR, cloning, etc.). Experience in cell culture essential. Experience in gene therapy preferred. Must be computer literate.

To be considered, forward your resume to: St. Jude Children's Research Hospital, Human Resources Dept., 332 N. Lauderdale, Memphis, TN 38105. Fax: 901-495-3123. E-mail: virgil.holder@stjude.org Learn more by visiting our website at:

www.stjude.org

SJCRH is an equal opportunity employer.

FACULTY POSITIONS

The Baylor College of Medicine, Department of Medicine, Section of Infectious Diseases is seeking four outstanding, full-time research-oriented faculty members for tenure-track appointments at the Assistant, Associate or Full Professor of Medicine levels. Candidates must have M.D., Ph.D. or M.D./Ph.D. degree(s) and a track record or high likelihood of obtaining external funding. Particularly desirable areas of research expertise include, but are not limited to:

- 1) neutrophil biology;
- 2) rodent models of pneumonia;
- 3) mucosal biology;
- 4) nitric oxide signaling; and
- 5) structural biology of signaling molecules;
- 6) hematopoietic stem cell and stromal cell biology.

Successful candidates will receive attractive start-up packages. Salaries will be commensurate with qualifications and expertise. Applications will be accepted until all positions are filled. Interested individuals should send a CV and three references to:



David J. Tweardy, M.D.
Chief, Section of Infectious Diseases
Department of Medicine
Baylor College of Medicine
6550 Fannin, M.S., SM 1423
Houston, Texas 77030

Baylor College of Medicine is an affirmative action equal opportunity employer.

Department of Biology



BIOINFORMATICS

The Department of Biology of the University of Waterloo invites applications for two **TENURE TRACK** positions. The successful candidates will help launch a new joint Computer Science – Biology undergraduate program in Bioinformatics and will contribute to our research strength in a relevant discipline such as molecular biology, molecular evolution, molecular genetics, molecular systematics, proteomics, or genomics. Appointments will be at the **ASSISTANT PROFESSOR** or junior **ASSOCIATE PROFESSOR** level. Applicants must have a Ph.D. and be prepared to establish an active research program. Duties will include research, teaching at the undergraduate and graduate levels, and graduate student supervision.

Salary will be commensurate with qualifications and experience. Applicants should send their curriculum vitae, the names of three individuals willing to furnish letters of reference, and an outline (1–2 pages) of their proposed research program to: Dr. William D. Taylor, Professor and Chair, Department of Biology, Faculty of Science, University of Waterloo, Waterloo, Ontario, N2L 3G1 CANADA. The closing date for applications is September 30, 1999.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. These appointments are subject to the availability of funds. Additional information on the Department is available at http://www.science.uwaterloo.ca/biology/biology.html

POSITIONS OPEN

JILA

JILA (operated jointly by the National Institute of Standards and Technology and the University of Colorado) is devoted to research and applications in the fields of laser technology; optoelectronics; precision measurement; surface science and semiconductors; information and image processing; materials and process science; as well as basic research in atomic, molecular, and optical physics; precision measurement; gravitational physics; chemical physics; astrophysics; and geophysical measurement. Additionally, at JILA there is interest in fostering further interaction with industry research efforts in order to identify new, industrially relevant applications of the technologies developed. Applications are invited for two programs:

(1) **RESEARCH ASSOCIATESHIPS** for advanced research by recent Ph.D's. Applications are accepted and considered anytime throughout the year.

(2) **VISITING FELLOWSHIPS** for advanced research by senior scientists. Deadline for completed applications is November 1, 1999.

Further information may be obtained from: The Secretary, Visiting Scientists Program, JILA, Box 440, University of Colorado, Boulder, CO 80309-0440. E-mail: jilavf@jila.colorado.edu; website: http://jilawww.colorado.edu.

The University of Colorado at Boulder is committed to diversity and Equality in Education and Employment.

POSTDOCTORAL POSITION available immediately to study the catalytic mechanism of cytochrome c oxidase. Ideally candidates should have experience in purification and characterization of membrane proteins, steady state and transient spectroscopic methods, and proton inventory techniques. Send résumé to: Dr. Graham Palmer, Department of Biochemistry and Cell Biology MS 140, Rice University, 6100 Main Street, Houston, TX 77005. E-mail: fabian@bioc.rice.edu. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Two (2) Postdoctoral positions are available effective September 1, 1999, to study the role of cannabinoids on macrophage and microglial cell function. The laboratory applies molecular, immunocytochemical, ultrastructural, immunological, and cell functional approaches to address this issue. Highly motivated individuals with technical skills in any of these areas are desirable. Must be U.S. etitzen/permanent resident. See websites: http://views.vcu.edu/~micro; http://www.medschool.vcu.edu; http://www.richmond.com.

Send curriculum vitae, research summary, and three letters of reference to:

Guy A. Cabral, Ph.D.
Professor
Department of Microbiology and Immunology
Medical College of Virginia of
Virginia Commonwealth University
1101 East Marshall Street
Richmond, VA 23298-0678
E-mail: gacabral@hsc.vcu.edu

RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

Two positions in ecosystem modeling and GIS analysis investigating effects of climate and land-use change on populations of ungulates in the Rocky Mountains. Duties: Adaptation/modification of a spatial simulation model-GIS system. Qualifications: Ph.D. in natural resource science, experience in use of simulation models, programming, GIS, and ability to work in interdisciplinary team. \$36,000 per 12 months plus benefits. Application deadline September 15, 1999. Send letter of application, curriculum vitae, and contact information for three references to: Arlene Boaman, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, CO 80523-1499. Colorado State University is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION at Purdue University available on a NIH-funded project to study the properties of clustered free radicals and their stable products formed in various DNA model systems and chromatin by ionizing radiations of various energies. This is an interdisciplinary, collaborative project involving several laboratories and offers the opportunity to work in leading-edge areas of magnetic resonance and other molecular spectroscopy. Candidates should have expertise in biochemistry/molecular biology. Send cover letter, curriculum vitae, and names, telephone numbers, and e-mail addresses of three references to: Prof. John D. Zimbrick, School of Health Sciences, Purdue University, 1338 CIVL, West Lafayette, IN 47907-1338. FAX: 765-496-1377; e-mail: zimbrick@purdue.edu. Purdue University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Seek motivated person to study the cis- and transacting factors that regulate cytokine mRNA stability and nonsense codon-mediated mRNA decay (NMD). Join a laboratory containing several Postdoctoral Fellows studying gene expression at the transcriptional and post-transcriptional levels. Opportunity to train in both the gene expression and immunology fields. Send curriculum vitae to: Miles F. Wilkinson, Department of Immunology, University of Texas M. D. Anderson Cancer Center, Box 180, 1515 Holcombe Boulevard, Houston, TX 77030. E-mail: mwilkins@notes.mdacc.tmc.edu.

PROFESSIONAL RESEARCHER POSITION in generation of transgenic *Drosophila*, experiments in fly biology, and maintenance of fly line collection. Minimum M.S. in biological discipline. Send curriculum vitae and names of three references to: Marilinda Eller, School of Biological Sciences, University of Kentucky, Lexington, KY 40506. *Equal Employment Opportunity*.

Strengthen our fight against infection

Fungal Molecular Biologist Sandwich, Kent

We market the world's leading prescription antifungal and are pathogens is essential and experience of working with reporter continuing to make a massive investment in identifying and developing new targets and screens. This role has been created to strengthen our antifungal project team.

Under the guidance of senior molecular biologists at Sandwich, you'll carry out fungal gene cloning, expression and knock-outs, and undertake basic enzyme/receptor assay development. You'll also evaluate and adapt new techniques from literature and academic laboratories, and contribute to the identification of new targets. An important part of the role will involve liaising with Millennium (our collaborating partner in the US) and transferring their techniques and methodologies to Pfizer in the UK.

A graduate, with at least 3 years' relevant post-graduate research experience, or a newly-qualified PhD, you should already have a good knowledge of such techniques as DNA cloning and expression, nucleic acid manipulation and basic assay development. Molecular biology experience in yeast or the fungal

genes would be advantageous.

We're looking for someone with an aptitude for formulating sound scientific hypotheses and acquiring and applying knowledge gained from colleagues, collaborators and literature. In addition, the close links we have with Millennium mean you're likely to have the opportunity to work with them in the US.

If you're eager to make your mark in this exciting area, please apply in writing, enclosing a full CV and quoting reference T047/1999 to Joanna Short, Resourcing Adviser, Research Personnel, Pfizer Central Research (IPC 077), Ramsgate Road, Sandwich, Kent CT13 9NJ, UK. Fax 01304 652145.

Closing date: 5th August 1999.

http://www.pfizer.co.uk/recruit

Central Research Pfizer

Be part of the cure

<u>Scientist</u>

Tissue Engineering Inc. is a growing biotech company based in South Boston conducting research and development of technologies to repair diseased or injured tissues and organs. The company's core technology is based upon high-information biopolymers manufactured into a variety of textile constructs such as foams, fibers, membranes, and tubes. These scaffolds may be used as delivery vehicles for growth factors, cell therapies, or drugs, or enriched with tissue-specific cytokines and other extracellular matrix macromolecules to engineer tissue and organ prostheses having dental, orthopedic, wound healing and cardiovascular applications

TEI has recently formed a collaboration with a major cardiovascular company to develop such tissue engineered prostheses for cardiovascular applications The program launch requires two Scientist positions, available on or around August 1. Both positions require a Ph.D. with postdoctoral experience

Vascular product development: Requires a cell biologist experienced with endothelial cell biology, vascular physiology and cell signaling, who will work closely with bioengineers and preclinical scientists to develop a commercially viable vascular prosthesis. Person will play a lead role in the performance and supervision of in vitro analysis and in vivo trials

Materials analyst: Requires a biochemist able to determine the components of complex mixtures of biopolymer and signaling molecules, and manipulate compositions for directed responses after incorporation into manufactured materials for cardiovascular and other applications. Supervision of continuous improvement of materials, functions or processing methods, working toward manufacturing capabilities, is an integral part of the position.

Candidates should demonstrate independence, resourcefulness and flexibility to work on multiple aspects of complex projects. Ability to work for extended periods of time under clean room conditions required. Product development or industry experience highly desirable. Applicants must be permanent residents or citizens of the United States.

Send curriculum vitae, brief descriptions of research experience and three references to:

> Tissue Engineering Inc. 451 D Street Boston, MA 02210. e-mail: TEINC19@IDT.NET



Two Tenure-Track **Faculty Positions** in Immunology

The interdisciplinary Immunology and Microbial Disease Program at the Albany Medical College invites applications for two tenure-track faculty positions at the Assistant Professor level from individuals who have a doctoral degree, postdoctoral experience, and demonstrated research productivity. We are particularly interested in applicants with expertise in immunology as related to protection from microbial disease. The successful candidates will be expected to establish independent, extramurally-funded research programs and participate in the teaching of medical and graduate students. The Institution's new Strategic Research Plan approved by the Board of Directors is designed to promote and expand biomedical research at Albany Medical College by recruiting new faculty who will receive competitive salaries, attractive start-up packages, newly-renovated research laboratories, and access to outstanding core facilities. In addition, the College has established close relationships with the New York State Wadsworth Laboratories and the Trudeau Institute, providing a diverse environment that is rich in immunology and infectious disease expertise. Albany Medical College is located in a mid-sized city within the New York Capital Region, and has easy access to Boston, New York, and the Adirondack Mountains.

Applicants should send by September 30, 1999, their curriculum vitae, a statement of research plans, and three letters of reference to:

Dennis W. Metzger, Ph.D. Professor and Program Director Immunology and Microbial Disease Program, MC-151 Albany Medical College 47 New Scotland Avenue Albany, NY 12208

> For further information about the program, visit www.amc.edu/Academic/Research/imd.htm

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

PH.D. SCIENTIST BIOCHEMIST/ MOLECULAR PHARMACOLOGIST

Palatin Technologies, Inc., a pharmaceutical company engaged in development and commercialization of antibody and peptide-based products using its enabling technologies, is seeking a highly enthusiastic scientist to join its drug lead development and optimization efforts.

The selected candidate will be responsible for design, development, and implementation of modern molecular and cell-based bioassays for screening synthetic compounds. The range of responsibilities include procurement, culture, and purification of the molecular target for the assay to the development of appropriate reporter ligands for use in these assays. Job duties also include management of data generation, analysis, and organization. The selected candidate will work directly with a group of Chemists dedicated to the generation and optimization of preclinical leads.

Successful candidate will be Ph.D. in biochemistry or molecular pharmacology with two to three years of relevant drug discovery experience in industry or academic setting. Technical expertise must include tissue culture, protein purification, radiochemical and spectrophotometric assays for drug screening, receptor and enzyme kinetics, and data handling and analysis. Experience with molecular biology, integration of genomic information into drug discovery process, and use of bacteriophage/plasmid peptide libraries is preferred. The position requires excellent communication skills and ability to work in a project team-oriented environment. Palatin offers competitive salaries and a comprehensive benefits package. Please submit your résumé along with a cover letter indicating job code: A79-SS to: Palatin Technologies, Inc., 175 May Street, Suite 500, Edison, NJ 08837. Affirmative Action/Equal Opportunity Employer.

URBAN ENTOMOLOGY UNIVERSITY OF ARIZONA

The Department of Entomology seeks candidates for an extension faculty position as ASSISTANT/ASSOCIATE SPECIALIST to improve management of urban arthropod pests in Arizona through an innovative extension/research program. Applicants must have a Ph.D. in entomology or related field. The position will be at the Maricopa Agricultural Center (30 miles south of Phoenix). To apply, submit a letter of interest, ideas for developing an urban entomology program in the arid Southwest, curriculum vitae, transcripts, up to five papers, and the names and addresses of three references to: Dr. Paul Baker, Search Committee Chair, Department of Entomology, The University of Arizona, Tucson, AZ 85721. Applications should be sent as soon as possible, but will be accepted until the position is filled. Details available at website: http://hr2.hr.arizona.edu/14047fac.htm. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS are available for Ph.D's or M.D.-Ph.D's in a program under the direction of Anil K. Rustgi, M.D., which focuses on the molecular biology and genetics of gastrointestinal cancers, especially in relation to transcriptional regulation of gene expression and transgenic mouse models of carcinogenesis. A strong background in molecular biology is required. Experience in transcription regulation, protein/DNA interaction, and transgenics is desirable. Send curriculum vitae and three references to: Anil K. Rustgi, M.D., Chief of GI Division, 600 A CRB, University of Pennsylvania, 415 Curie Boulevard, Philadelphia, PA 19104. E-mail: anil2@mail.med.upenn.edu; FAX: 215-573-2024. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the mechanism of repair of crosslinked DNA. Candidates should have experience in DNA biochemistry and molecular biology. Send curriculum vitae and the names of three references to: Dr. Henry S. Friedman, The Brain Tumor Center, Box 3624, Duke University Medical Center, Durham, NC 27710. FAX: 919-684-6674; e-mail: fried003@mc.duke.edu.

POSITIONS OPEN

THE REGULATION OF CELLULAR PROLIFERATION AND DIFFERENTIATION

RESEARCH ASSOCIATE positions to investigate the regulation of cyclin dependent kinase activities and how these activities alter cellular proliferation and differentiation. Highly motivated individuals are sought to investigate the molecular mechanisms that control the cell cycle and the regulation of terminal growth arrest during differentiation. Outstanding research environment and competitive compensation. Send curriculum vitae and the names of three references to:

W. J. Pledger, Ph.D.
Associate Center Director for
Basic Research
H. Lee Moffitt Cancer Center and
Research Institute
12902 Magnolia Drive
Tampa, FL 33612

PRINCIPAL INVESTIGATOR SACCOMANNO RESEARCH INSTITUTE

Principal Investigator/Lead Scientist to head up a federally funded project to identify familial factors that contribute to lung cancer susceptibility. The successful candidate will also participate in collaborative efforts to further develop methods for the early detection of lung cancer.

Requirements include a Ph.D. and/or M.D.; post-doctoral experience; significant peer-reviewed publications in positional cloning or cancer genetics; excellent written and oral communication skills. Prefer experience in grant preparation, design and conduct of clinical trials, and a track record of success in extramural funding.

The Saccomanno Research Institute is a small, well-equipped research facility with a record of successful grant funding. The rich research resources include an expansive tumor tissue archive. SRI is connected with a regional nonprofit hospital that provides significant financial support. A concurrent research/teaching appointment with Mesa State College is available.

Application must include curriculum vitae; description of research interests and future plans; three representative reprints; names and telephone numbers of three references. Send three applications to: Mary L. Crumbaker, Administrative Director, Saccomanno Research Institute, c/o Human Resources, St. Mary's Hospital and Medical Center, P.O. Box 1628, 2635 North 7th Street, Grand Junction, CO 81502. E-mail inquiries to e-mail: mcrumbaker@stmarygi.com; Telephone: 970-244-2418 or 970-244-7194.

Anticipated start date September 1999. Review is ongoing and will continue until the position is filled. *Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS available to study molecular mechanisms of Bacillus anthracis virulence and host-induced gene expression. Strong background in bacterial genetics and physiology with experience in molecular biology required. Experience in bacteria-macrophage interactions preferred. Send curriculum vitae, description of research experience, and names, telephone, and e-mail of three referees to: Dr. Theresa Koehler, Department of Microbiology and Molecular Genetics, University of Texas-Houston Medical School, 6431 Fannin, JFB 1.765, Houston, TX 77030. FAX: 713-500-5499; e-mail: tkoehler@utmmg.med.uth.tmc.edu.

POSTDOCTORAL POSITION available at the University of Illinois at Urbana-Champaign to engineer cell adhesion proteins for force probe measurements. Applicants must have a Ph.D. in biochemistry or related field. Those interested in biophysical studies of adhesion proteins are encouraged to apply. Send a résumé and three letters of recommendation to: Prof. D. Leckband, Department of Chemical Engineering, 600 South Mathews Avenue, Urbana, IL 61801.

POSITIONS OPEN

Several POSTDOCTORAL POSITIONS are available immediately to work in the Laboratory of Molecular and Developmental Biology in the National Eye Institute, National Institutes of Health. The research involves developmentally regulated, tissuespecific expression of multifunctional enzyme and crystallin genes in the lens and/or cornea as well as other tissues. This group is also investigating the multiple functions and disease associations of these enzyme-crystallins. Mice, zebrafish, and several invertebrates are presently being used. Methodologies include cloning, expression, and molecular analyses of cDNAs and genes, and production and utilization of transgenic mice, gene knockout mice, and transfected cells. Candidates must be U.S. citizens or permanent residents and have a Ph.D. or M.D. degree. Salary begins at \$30,000 and increases depending on experience. Please send curriculum vitae and the names of three references to: Dr. Joram Piatigorsky, Laboratory of Molecular and Developmental Biology, Building 6, Room 201, Bethesda, MD 20892-2730. FAX: 301-402-0781; e-mail: joramp@intra.nei. nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study the pathogenesis of HIV and human cytomegalovirus (CMV). Areas of HIV research examine factors that impact on mother-to-infant transmission, the role of macrophages, dendritic cells, viral quantification, viral phenotypes, cytokines and chemokines in HIV pathogenesis including central nervous system impairment. Additional research opportunities explore the consequences of phenotypic and genotypic antiretroviral resistance on the progression of HIVrelated disease in children and mother-to-infant transmission. Ongoing research projects on CMV study the cell types, molecular mechanisms, and pathogenic significance of CMV latency and reactivation. Additional studies examine CMV genotypes that confer antiviral resistance and markers of viral pathogenicity. Applicants should provide a curriculum vitae and three lettes of recommendation to: Stephen A. Spector, M.D., University of California, San Diego, Stein Research Building, 9500 Gilman Drive, La Jolla, CA 92093-0672. FAX: 858-534-7411; email: saspector@ucsd.edu.

POSTDOCTORAL SCIENTIST PROSTATE CANCER

The Infectious Disease Research Institute (IDRI) is seeking a Ph.D. and/or M.D. Postdoctoral Scientist to join our efforts in the area of clinical oncology to examine immune responses in patients receiving therapeutic cancer vaccines. Successful candidate will have skills in cellular immunology, such as T cell cultivation, and cytokine assays. Experience in human immunology is preferred. IDRI offers competitive salary and benefits in a progressive work environment. Please send curriculum vitae, statement of research interests and experience, and names of three references by August 20, 1999, to: Infectious Disease Research Institute, Attn: K. Kinch, 1124 Columbia Street, Suite 200, Seattle, WA 98104. FAX: 206-754-5762. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

To study the molecular and cellular mechanisms of autoimmune disease. Experience in chemokines/cytokines required. Experience in macrophage biology, gene transfer, and kidney disease desired. Send résumé and references to: Dr. Vicki Rubin Kelley, e-mail: vicki@bustoff.bwh.harvard.edu; FAX: 617-525-5830

POSTDOCTORAL POSITION available immediately to study molecular and cellular biology of prostate cancer. Minimum requirements include previous experience in molecular and cellular biology. Experience with LnCaP cells and computer highly desirable. Send cover letter and résumé to: J. Jankun, Ph.D., Urology Research Center, Medical College of Ohio, Toledo, OH 43699. E-mail: urology@golemxiv.dh.mco.edu; website: http://golemxiv.dh.mco.edu/~jerzy/.



Avigen, Inc. is a leader in the development of gene therapy based on adeno-associated virus (AAV) for the treatment of inherited & acquired diseases. Our continued growth has created the following opening in our Alameda, Ca. facility for an experienced and self-motivated professional to join our expanding R&D Team.

DIRECTOR OF DEVELOPMENT

Great opportunity for an experienced, energetic and motivated individual to provide scientific leadership, management and vision to product development efforts to commercialize AAV based gene therapy. The Director of Development will head a department comprising 10–15 scientists engaged in scale up, purification and analytical methods development for the commercial manufacture of AAV gene therapy vectors using mammalian cell culture.

The ideal candidate will hold a Ph.D degree and will have a minimum of 10 years of relevant experience in biopharmaceutical process and methods development, including at least 5 years in a management or supervisory role. Experience in the development of pharmaceutical products derived from mammalian cell culture in a GMP environment is highly desirable and familiarity/experience with viral vector based gene therapy technology is a plus. This position will provide the successful candidate with an excellent opportunity for personal and professional growth, as part of a company at the forefront of gene therapy research.

Candidates must have excellent communications skills, a demonstrated track record of productivity and a desire to work in a highly collaborative team environment are key requirements for this position.

We offer competitive salaries, benefits paid in full by the Company, stock options, 401(k), growth potential and an exciting opportunity to work with a dynamic team focused on exploring the impact of gene therapy on selected human diseases.

To apply, email/send/fax resume, to: Avigen, Inc., Human Resources, 1201 Harbor Bay Parkway, Suite 1000, Alameda, CA 94502; e-mail: sdelph@avigen.com, fax: (510) 748-7155. EOE — Principals Only — NO CALLS.



Postdoctoral position

Who we are

F. Hoffmann-La Roche Ltd, one of the world's leading pharmaceutical companies, has a longstanding reputation for successful and innovative drug development. Roche's preclinical drug metabolism and pharmacokinetics department in Basel, Switzerland, is seeking a postdoctoral fellow in drug metabolism.

The position

We are looking for an enthusiastic, self-reliant post-doctoral scientist to join a project investigating new approaches to predicting drug disposition and interactions in man. The objective of the project will be to identify and validate tools for predicting elimination rates and inhibitory effects of drugs in man, based on data from in vitro and animal model systems. The project will focus on various in vitro methodologies (phase I and phase II metabolic enzyme systems, cellular systems, active transport assays) and on in vivo model systems for investigating drug disposition and interactions.

Who you are

Applicants must have a PhD degree in the biological sciences, with a strong scientific background in enzymology (mammalian cytochrome P450), analytical experience (HPLC, handling of radioisotopes) and preferably experience in developing in vitro/in vivo model systems for drug metabolism. Candidates must be committed to working in an interdisciplinary team and have excellent written and verbal English communication skills.

Who to contact

If the above profile fits your background and you are interested in a challenging postdoctoral position, please forward your application, with full supporting documentation, to: F. Hoffmann-La Roche Ltd, Mr Ralph Gysin, PSPB-1, 52/210, P.O. Box, 4070 Basel, Switzerland, quoting reference: Gr2014. For further details on the position contact: christoph.funk@roche.com or rodolfo.gasser@roche.com.

POSTDOCTORAL RESEARCHER GENETIC ANALYSIS OF COMPLEX TRAITS IN MICE

Department of Animal Science at the University of Nebraska-Lincoln is seeking candidates for this position funded by an NIH grant for up to four years to perform research in detection, fine mapping, and positional cloning of QTL regulating metabolic rate and obesity in unique selection lines of mice. Will include phenotyping and genotyping of large populations, database management, and statistical analysis. Requires a Ph.D. in biological science with emphasis in QTL/gene mapping and/or molecular genetics. Submit letter of application; detailed résumé of education (including transcripts), experience, qualifications, and publications; and names, addresses, and telephone numers of three references by September 7, 1999 (or until an acceptable candidate is hired), to: Dr. Daniel Pomp, Department of Animal Science, University of Nebraska-Lincoln, A218 AnS, P.O. Box 830908, Lincoln, NE 68583-0908. No e-mail applications accepted. Contact Daniel Pomp, Telephone: 402-472-6416 for additional information. UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and assures reasonable accommodation under the Americans with Disabilities Act.

POSTDOCTORAL POSITION available immediately. The focus of this laboratory is the study of heterotrimeric G protein signal transduction pathways as they relate to immune and inflammatory processes. Specifically, a novel family of proteins, the Regulators of G-protein Signaling (RGS) (Nature 379:742, 383:172), are studied using biochemical assays of purified, recombinant proteins, expression in mammalian cell lines, and generation of gene-targeted mice. The successful applicant must have a Ph.D. and/or M.D., experience in standard biochemistry and molecular biology techniques, and less than five years of postdoctoral experience. Please send curriculum vitae and the names, addresses, and telephone numbers of three references to:

Dr. Kirk Druey, Laboratory of Allergic Diseases NIAID/NIH/Twinbrook II, Room 203 12441 Parklawn Drive Rockville, MD 20852 USA E-mail: kdruey@atlas.niaid.nih.gov

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study regulation of urokinase plasminogen activator receptor (uPAR) and vascular endothelial growth factor (VEGF) genes by hypoxia and epidermal growth factor in cancer cells. M.D. or Ph.D. degree and experience in molecular biology are required. Please send curriculum vitae and names of three references to: Dr. Amit Maity, Department of Radiation Oncology, University of Pennsylvania School of Medicine, Room 195, John Morgan Building, 3620 Hamilton Walk, Philadelphia, PA 19104-6072. E-mail: maity@mail.med.upenn.edu; FAX: 215-898-0090.

POSTDOCTORAL POSITIONS. To study regulation of gene expression during fat synthesis and adipocyte differentiation. Research involves (1) characterizing and cloning transcription factors involved in hormonal regulation of lipogenic genes and (2) studying mode of action of regulatory molecules in adipogenesis including pref-1. Send curriculum vitae and names of references to: Dr. H. Sul, Department of Nutritional Sciences, University of California at Berkeley, Berkeley, CA 94720-3104. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study antigen presentation by dendritic cells in a mouse model. Three years of grant support assured. Candidate should have experience in immunology, immunofluorescence, flow cytometry, and, if possible, molecular biology. Send curriculum vitae and reference to: Fred Finkelman, M.D., The University of Cincinnati College of Medicine, e-mail: ffinkelman@mem.po.com; FAX: 513-558-3799. University of Cincinnati is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP METABOLISM OF TOBACCO-RELATED CARCINOGENS

The H. Lee Moffitt Cancer Center and Research Institute, located on the campus of the University of South Florida, invites applications for a Postdoctoral Fellowship in the laboratory of Dr. Philip Lazarus. Studies will include the analysis of tobacco carcinogen metabolic pathways and the importance of metabolic and DNA repair pathways in cancer susceptibility. A background in molecular biology as well as basic biochemistry (i.e., HPLC) is desirable. Previous experience in DNA adduct determinations would be an asset. Send letter of application, curriculum vitae, and three letters of reference to: Christine O'Connell, Director, Laboratory Operations, H. Lee Moffitt Cancer Center and Research Institute, 12902 Magnolia Drive, Tampa, FL 33612. A drug-free workplace. Equal Opportunity/Affirmative Action Employer.

GENE THERAPY AND TOLERANCE

Seeking applicants for NIH-funded positions, either at the POSTDOCTORAL RESEARCH AS-SOCIATE or JUNIOR FACULTY level. Rank dependent on qualifications. Positions immediately available to study gene therapy and tolerance. Laboratory interests include manipulation of hematopoietic stem cells, hepatocytes, and islet cells, and creation of conditionally immortalized liver and islet cell lines. Promising laboratory investigation will be integrated into the clinical transplantation programs. Applicants should have a Ph.D. or M.D., a strong background in virology and/or molecular biology, and be a U.S. citizen or permanent resident. Send curriculum vitae and references to: Ira J. Fox, M.D., Department of Surgery, University of Nebraska Medical Center, 983285 Nebraska Medical Center, Omaha, NE 68198-3285. An Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL FELLOWSHIP IN PSYCHONEUROIMMUNOLOGY AT THE OHIO STATE UNIVERSITY

NIH-supported Postdoctoral Training Grant position for scientists or clinicians (Ph.D. and/or M.D., D.D.S., D.V.M.) to conduct research on communication among the nervous, endocrine, and immune systems is currently available. Applicants must be U.S. citizens or permanent residents of the United States. Applicants should submit a letter stating their research interests along with curriculum vitae and the names of three references to: Caroline C. Whitacre, Department of Molecular Virology, Immunology, and Medical Genetics, 333 West 10th Avenue, Room 2078, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-cra veterans, disabled veterans, and individuals with disability are encouraged to apply

POSTDOCTORAL POSITIONS in molecular and cellular neurobiology is available immediately at the University of Pittsburgh School of Medicine. Motivated individuals are invited to join a laboratory working on the transport of neurotransmitters into secretory vesicles (see: Cell 70:539; J. Cell Biol. 139: 907; Ann. Rev. Neurosci. 20:125). Our current research focuses on (1) membrane trafficking of vesicular monoamine transporter (VMAT) in neurons and neuroendocrine cells, and (2) its implication in pathogenesis of Parkinson's disease. Individuals with a Ph.D./M.D. degree and a strong background in molecular and cell biology are encouraged to apply. Send your curriculum vitae and names of three references to: Dr. Yong-Jian Liu, Assistant Professor of Department of Neurology and Neurobiology, University of Pittsburgh, S-511 BST, 3550 Terrace Street, Pittsburgh, PA 15213. E-mail: yjliu@ itsa.ucsf.edu.

POSITIONS OPEN

JAMES BOSWELL POSTDOCTORAL FELLOWSHIP

The California Institute of Technology and The Huntington Medical Research Institutes (HMRI) announce the availability of an endowed Postdoctoral Fellowship for collaborative research at Caltech. This two-year Fellowship is open to men and women who have recently received their Doctorate and are interested in doing research in the areas of neurological magnetic resonance spectroscopy, neural prostheses, functional electrical stimulation of the nervous system, cancer genetics, cardiovascular physiology, or other areas closely related to the interests of faculty members at Caltech and HMRI. The Boswell Fellowship provides an annual stipend between \$29,000 and \$32,000 commensurable with Fellow's qualifications, as well as the eligibility to participate in Caltech's health and dental program.

Completed applications with a letter outlining specific field of research, curriculum vitae, and three letters of reference should arrive at Caltech before September 1, 1999, addressed to: The James Boswell Postdoctoral Fellowship Committee, c/o Caltech, 1200 East California Boulevard, MC 216-76, Pasadena, CA 91125.

POSTDOCTORAL POSITION IN PROTEOGLYCAN RESEARCH AND CANCER

A Postdoctoral position is available to investigate the biology of the proteoglycan perlecan. Perlecan, a major heparan sulfate proteoglycan of basement membranes, is involved in tumor angiogenesis. The candidate is sought to join a multidisciplinary team of Researchers involved in investigating the molecular mechanism by which this proteoglycan affects cell growth and tumor development (Annu. Rev. Biochem. 67:609–652, 1998; J. Clin. Inv. **102**:1599–1608, 1998; Proc. Natl. Acad. Sci. USA **96**:3092–3097, 1999; J. Biol. Chem. 274:4489-4492, 1999; J. Biol. Chem. 274:18843-18846, 1999). Requirements include a Ph.D. or an M.D.-Ph.D. in biochemistry or cell biology. A molecular biology background is highly desirable. Send résumé and three letters of reference to: Dr. Renato V. Iozzo, Department of Pathology, Anatomy and Cell Biology, Thomas Jefferson University, Jefferson Medical College, 1020 Locust Street, Room 249 JAH, Philadelphia, PA 19107-6799 USA. FAX: 215-932-7969; e-mail: iozzo@lac.jci.tju.edu. Thomas Jefferson University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION WNT SIGNALING IN SKIN AND HAIR

A Postdoctoral position is available immediately to study the roles of Wnt signaling in the development of skin and hair and in epidermal tumorigenesis. Current focus is on Wnt genes expressed in developing hair follicles, using transgenic and knockout mice to study the roles of these genes in vivo (see: Developmental Biology 207:133–149, 1999). Candidates should have a Ph.D. or M.D. degree and U.S. ditizenship or permanent resident status. Salary range is \$26,256 to \$41,268. Please send curriculum vitae to: Sarah E. Millar, Ph.D., Department of Dermatology, University of Pennsylvania, M8d Stellar-Chance Laboratories, 422 Curie Boulevard, Philadelphia, PA 19104-6100. FAX: 215-573-9102; e-mail: millars@mail. med.upenn.edu.

POSTDOCTORAL POSITIONS (two) available to study the neurochemical mechanisms underlying chronic pain, opioid analgesia, and blood pressure control. Projects include (1) effects of analgesic agents on serotonin or peptide release in the brain using microdialysis/HPLC-ECD; (2) effects of prolonged analgesia on activity-dependent neuroplasticity using behavioral pharmacology/immunocytochemistry. E-mail or mail letter of interest, curriculum vitae, and references to: Brad Taylor, Ph.D., University of Missouri–Kansas City, Department of Pharmacology, M3-C15, Kansas City, MO 64108. E-mail: taylorb@umkc.edu. Deadline: September 7,

In order to develop strong programs in clinical research and to facilitate academic successions in clinical departments, the Faculty of Medicine of the University of Lausanne (Switzerland) invites applications for

Leenaards Fellowships in Clinical Medicine

for tenure-track junior faculty positions (Assistant Professor level) to be filled in our clinical departments (i.e. Surgery, Medicine, Pediatrics, Radiology, Gynecology and Obstetrics, Psychiatry, Community and Preventive Medicine, Ophthalmology.)

According to the by-laws of the Leenaards Foundation, candidates trained or working in a Swiss University hospital or Swiss candidates should hold MD or MD/PhD and have an advanced training in patient care and clinical research with a strong track record of publications.

Applications including full CV, list of publications, statement of research interests and three references should be sent to the **Dean of the Faculty of Medicine**, Le Champ de l'Air, Rue du Bugnon 21, CH - 1005 Lausanne, not later than September 10th 1999.



UNIVERSITY COLLEGE LONDON

UCL Department of Pharmacology

Lecturer in Pharmacology

There will be a vacancy for a Lectureship in this Department to take effect from October 1st, 1999 or at an agreed time thereafter. The Department was rated in the premier category in all of the U.K. University Research Assessment Exercises to date (5*A in 1996). It has special research strengths in receptors and ion channels, in molecular pharmacology, in neuropharmacology and in immunopharmacology. Applications from scientists with strong research interests in these or any other areas are invited. The prime requirements are outstanding research or research potential, and the ability and willingness to make a scholarly contribution to our undergraduate science and medical student teaching and Ph.D. research training programmes.

Salary on the Universities Lecturer A/B scale (\$18,185 - \$30,065 plus \$2,134 London Allowance) depending on experience.

Enquiries and applications (with C.V., copies of up to three selected publications, a one page statement of research plans and the names of three referees) to: Professor D.A.Brown, FRS, Department of Pharmacology, University College London, Gower Street, London, WC1E6BT (UK). Phone (44)(0)171-380-7297, fax (44)(0)171-380-7298 e-mail:d.a.brown@ucl.ac.uk.

The closing date for applications is Friday, 13th August 1999.

Working Toward Equal Opportunity



DEPARTMENT OF CHEMISTRY

The Department of Chemistry has national and international research strengths in a wide range of key strategic areas, including biological chemistry, fluorine chemistry, electrochemistry, organometallic chemistry and catalysis, target synthesis and new synthetic methods, and was well ranked in the last research assessment exercise (grade 4 RAE 96). The University now wishes to enhance the research profile of the Department through three new appointments, two at professorial level.

CHAIR OF INORGANIC CHEMISTRY AND CHAIR OF ORGANIC CHEMISTRY

The University is seeking an outstanding inorganic chemist and an outstanding organic chemist to provide intellectual leadership and enhance these sections of the Department. Applicants should have an international reputation and a good track record for attracting external funding. Applications from candidates with interests in any area of inorganic or organic chemistry are welcome, particularly those that would complement the existing strategic research areas of the Department

Salary will be within the professorial range.

Further particulars may be obtained from the Personnel Office (Professorial Appointments), University of Leicester, University Road, Leicester LE1 7RH, UK. Tel: +44 116 252 2422, email: pat2m@admin.le.ac.uk, Fax: +44 116 252 5140. Candidates should submit one unbound copy of their application to the Personnel Office (Professorial Appointments).

Informal enquiries are encouraged and should be addressed to Professor Paul M Cullis, tel: +44 116 252 2130, email: pmc@le.ac.uk.

LECTURESHIP IN PHYSICAL CHEMISTRY

Salary £17,238 to £30,065 pa (Ref: A5297/S)

Applications are invited for appointment to a Lectureship in Physical Chemistry. Applications from candidates with interests in any area of physical chemistry are welcome, but particularly those that would complement the existing strategic research areas of the Department. Applicants should have a strong track record in an area with potential for attracting external research funding.

Further particulars and application forms are available, by quoting the reference number, from the Personnel Office (Academic Appointments), University of Leicester, University Road, Leicester LE1 7RH, UK. Tel: +44 116 252 2439.

Informal enquiries may be addressed to Professor A R Hillman, tel: +44 116 252 2144, email: arh7@le.ac.uk.

Closing date for all posts is 3 September 1999.

Towards equal opportunities

POSTDOCTORAL FELLOWSHIP

The Center for Insect Science, through a NIH training grant, offers a Fellowship for postdoctoral research at the interface between molecular biology and the biochemistry, physiology, neurobiology, genetics, and ecology of insects. The appointment will be for 12 to 15 months, depending on availability of funds and number of years of postdoctoral experience. The Fellow will work in the research group of a Center faculty member, and will be encouraged to develop his/her own ideas in a supportive, collaborative atmosphere. The Fellow will receive a stipend and funds to support his/her research. Applicants must have a Ph.D. and according to the terms and conditions of the grant, must be U.S. citizens, noncitizen nationals, or permanent residents. Candidates with previous NRSA support should note the statutory limitation of three years of total aggregate support. Review of application materials will begin on 6 August 1999, or until the position is filled.

To apply, please send a letter with statement of research interests and identification of a potential Faculty Advisor (see list of faculty under "Scientific Members" at website: www.arl.arizona.edu/cis), curriculum vitae, and names of three references to: Dr. Leslie P. Tolbert, Chair, Search Committee, Center for Insect Science, The University of Arizona, 225 Life Sciences South, P.O. Box 210106, Tucson, AZ 85721-0106. Applications from women amembers of minority groups are particularly encouraged. The University of Arizona is an Affirmative Action/Equal Employment Opportunity/ADA Employer.

POSTDOCTORAL SCIENTISTS MOLECULAR BIOLOGY

The Infectious Disease Research Institute (IDRI) is seeking Ph.D. and/or M.D. Postdoctoral Scientists to join our efforts in the diagnosis, treatment, and prevention of human infectious diseases. Successful candidates will have molecular biology background and work on the development of vaccine candidates for leishmaniasis or tuberculosis. Skills in full-length cloning and gene expression are preferred. IDRI offers competitive salary and benefits in a progressive work environment. Please send curriculum vitae, statement of research interests and experience, and names of three references by August 20, 1999, to: Infectious Disease Research Institute, Attn: K. Kinch, 1124 Columbia Street, Suite 200, Seattle, WA 98104. FAX: 206-754-5762. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Positions are available on an ongoing basis to conduct research within different research groups in the Institute of Molecular Biology and the Institute of Neuroscience at the University of Oregon. The purpose of this notice is to establish and maintain a pool of qualified applicants. Ph.D. in molecular biology, neuroscience, or related field is required. Please see our websites: www.molbio.uoregon.edu and www.neuro.uoregon.edu for information about the type of research being done. Salary dependent upon experience. For application materials, please Telephone: 541-346-5151; e-mail: rita@prospero.uoregon.edu. The University of Oregon is an Equal Opportunity/ Affinnative Action Institution committed to cultural diversity and compliance with the Americans with Disabilities Act. Women and minorities are urged to apply.

Announcing the Duke POSTDOCTORAL FEL-LOWSHIPS in molecular evolution and comparative genomics. We invite innovative, synthetic proposals from scientists of any nationality to carry out independent research in the Botany or Zoology Departments at Duke University. Research topics can include theoretical or empirical work in any area of molecular evolution. Applications should send a preferred starting date, curriculum vitae, research proposal, research summary, and two letters of reference to: Cliff Cunningham, Zoology Department, Duke University, NC 27708-0325 USA. Please visit website: www.molevol.duke.edu. Duke University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION MERCURY CYCLING BETWEEN THE EARTH'S SURFACE AND THE ATMOSPHERE Mercury Research Group Environmental Sciences Division Oak Ridge National Laboratory

The Mercury Research Group in the Environmental Sciences Division at Oak Ridge National Laboratory (ORNL) is seeking candidates for a new Postdoctoral position. Candidates would be involved with projects, all related to the cycling of mercury between the Earth's surface and the atmosphere. The Mercury Research Group is involved in projects related to the following topics: dry deposition of mercury, the formation of dissolved gaseous mercury, understanding the role of natural Hg emission sources in the mercury cycle, application of stable Hg isotopes to understand the biogeochemical cycling of Hg in watersheds, airborne reactive gaseous mercury and its measurement, improving flux chamber methods for measuring mercury fluxes, application of micrometeorological methods to measuring Hg fluxes over vegetation, studies of plant/Hg interactions, measurements of inorganic and organic Hg fluxes from non-point industrial sources, including municipal landfills, and mercury interactions in the Arctic. Study sites include areas in the Great Lakes, Alaska, Florida, Nevada, and

Interested candidates should have recently completed their Ph.D., or soon expect to do so, in the fields of atmospheric chemistry, biogeochemistry, plant physiology, or air/surface exchange. Experience in some or all of the following areas would be useful: field atmospheric sampling methods, flux measurement, trace-level Hg analysis, automated analytical methods, plant/metal interactions, and controlled laboratory facilities.

This appointment will be for one year and renewable for up to three years. Applications will be accepted until October 15, 1999, or until the positions are filled. Appointments are offered through the ORNL Postdoctoral Research Associates Program, which is jointly administered by ORNL's Office of University and Science Education and the Oak Ridge Institute for Science and Education.

Interested candidates should complete and submit an application for the ORNL Postdoctoral Research Associates Program (complete the application for an "Advertised Position"). An application and complete description of this program is available at website: http://www.orau.gov/orise/edu/postgrad/ornlpdoc.htm.

Please reference project ORNL #99-6 when applying for this position.

In addition to sending an application to the location indicated on the website, interested candidates should also send a curriculum vitae, a description of research accomplishments and interests, and the names and telephone numbers of three references to: Dr. Steve Lindberg, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6038. Telephone: 423-574-7857; FAX: 423-576-8646; e-mail: sll@ornl.gov. Technical questions related to these positions should also be directed to Dr. Lindberg.

Oak Ridge National Laboratory, a multipurpose research facility managed by Lockheed Martin Energy Research Corporation for the U.S. Department of Energy, is an Equal Opportunity Employer committed to building and maintaining a diverse work force. The program is open to all qualified U.S. and non—U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.

POSTDOCTORAL POSITION AUTOIMMUNITY

Study basic mechanisms of systemic autoimmunity and tolerance (J. Clin. Invest. 97:2063, 1996; J. Exp. Med. 187:367, 1998; J. Immunol. 162:5775, 1999). Expertise in cellular immunology required. Send résumé to: Dr. Syamal K. Datta, Ward 3-315, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.

POSITIONS OPEN

POSTDOCTORAL POSITION PLANT DEFENSE SIGNAL TRANSDUCTION

A Postdoctoral position is available immediately to study the molecular-genetic mechanisms of signal transduction in plant defense against disease. Emphasis will be on the identification and characterization of genes involved in the activation of systemic acquired resistance in Arabidopsis thaliana and wheat. Research in Arabidopsis will focus on the characterization of mutants with defects in salicylic acid signaling (Plant Cell 11:191–206, 1999; Genes & Dev. 11:1621–1639, 1997). Additional projects involve the identification and characterization of genes differentially expressed in these mutants. The candidate should have a Ph.D. with a strong background in plant molecular biology and genetics. Previous experience working with Anabidopsis or wheat, and with differential display or cDNA subtractive cloning would be useful. Send curriculum vitae and letter of application outlining previous research experience and research interests, and have three letters of recommendation sent to: Dr. Jyoti Shah, Division of Biology, Kansas State University, Ackert Hall, Manhattan, KS 66506 USA. FAX: 785-532-6653; e-mail: shah@ksu.edu. KSU is an Equal Opportunity Employer and actively seeks diversity among its employees.

POSTDOCTORAL POSITION PATHOLOGY AND LABORATORY MEDICINE Indiana University School of Medicine

A Postdoctoral position is available to investigate the role of the tau protein in frontotemporal dementia. These studies would involve the production and characterization of transgenic mice, functional studies of mutant forms of tau, and protein-protein interaction assays. The applicant should have a Ph.D. and experience in molecular biology and/or tissue culture. A background in transgenic technology would be desirable but not essential. Funding is available for at least two years. Please send curriculum vitae, statement of research interests, and three letters of reference to: Jill Murrell, Ph.D., Department of Pathology and Laboratory Medicine, 635 Barnhill Drive, MS A128, Indianapolis, IN 46202. Indiana University is an Equal Opportunity/Affirmative Action Employer and especially encourages applications from women and members of minority groups.

POSTDOCTORAL/RESEARCH ASSOCIATE IN ELECTROPHYSIOLOGY

A position is available immediately for a foreign gradnate with a Ph.D. obtained since 1997 or a Canadian Ph.D. (no time limit). The applicant should be trained in electrophysiological techniques. The position is for three years and involves whole cell patch and single channel recordings of astrocytes. Chloride currents and the effect of intracellular chloride changes on potassium currents are the focus of the project. The salary will be based on experience with a minimum of \$26,000 (the University policy on benefits will apply). Please send curriculum vitae and names of referees to: Dr. Wolfgang Walz, Department of Physiology, University of Saskatchewan, 107 Wiggins Road, Saskatoon, Saskatchewan S7N 5E5 Canada. Telephone: 306-966-6551; FAX: 306-966-6532; e-mail: walz@ sask.usask.ca; website: http://www.usask/~walz/.

POSTDOCTORAL/RESEARCH ASSISTANT POSITIONS

Two positions are available, each for a one-year term, to investigate the molecular mechanisms involved in floral organ development in *Arabidopsis* and wheat and/or phosphorylation of cell cycle regularors. Experience in molecular biology techniques and/or protein biochemistry preferred. Join a growing department. B.A./B.S. required, M.S. or Ph.D. preferred. Send curriculum vitae, statement of research experience, and list of references to: **Dr. Judy Roe**, **Division of Biology**, **Ackert Hall**, **Kansas State University**, **Manhattan**, **KS** 66506-4901. Email: jroe@ksu.edu. *KSU is an Equal Opportunity Employer and actively seeks diversity among its employees.*

POSTDOCTORAL POSITIONS TISSUE ENGINEERING Georgia Tech/Emory Center for the Engineering of Living Tissues

Postdoctoral positions are available in the Georgia Tech/Emory Center (GTEC) for the Engineering of Living Tissues, an Engineering Research Center funded by the National Science Foundation. The thrust areas of GTEC's research program are cell technology, construct technology, and the technologies for integration into living systems. Specific applications include cardiovascular substitutes, orthopaedic tissue engineering, and encapsulated cell systems. Candidates should have a relevant background, a strong interest in one or more of the above fields, and be willing to work in an interdisciplinary environment and interact with both Engineers and Life Scientists. Successful candidates will have a unique opportunity to perform research in this exciting field. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: Professor R. M. Nerem, Director, Georgia Tech/Emory Center for the Engineering of Living Tissues, Parker H. Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA 30332-0363. The Georgia Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN DNA REPAIR MECHANISMS

A Postdoctoral position is available immediately to study the mechanisms of DNA repair glycosylases. Previous experience in at least one of the areas of DNA-protein interactions, enzyme mechanisms, or NMR spectroscopy is desired. Ph.D. in chemistry, biochemistry, or biophysics is required. Please send a cover letter, curriculum vitae, and the names of three references by August 10, 1999, to: Dr. James T. Stivers, Center for Advanced Research in Biotechnology, University of Maryland System, 9600 Gudelsky Drive, Rockville, MD 20850. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Biochemist with experience in molecular biology and protein chemistry techniques wanted to study structure/function aspects of the serpin C1-inhibitor. Send curriculum vitae and three letters of reference to: Philip Patston, Ph.D., Department of Oral Medicine and Diagnostics Sciences, University of Illinois at Chicago (MC 838), 801 South Paulina Street, Chicago, IL 60612 USA. E-mail: patston@uic.edu.

The University of Illinois at Chicago is an Equal Opportunity/Affirmative Action Employer.

NIH POSTDOCTORAL POSITION available to study the regulation of nitric oxide, catecholamine, and serotonin synthesis by tetrahydrobiopterin, the cofactor for the nitric oxide synthases, and the aromatic amino acid hydroxylases. Some molecular and cell biology experience preferred. Candidates must have less than five years of postdoctoral training. Send curriculum vitae and three letters of recommendation to: Sheldon Milstien, Ph.D., Laboratory of Cellular and Molecular Regulation, NIMH, Building 36, Room 2A-11, Bethesda, MD 20892. FAX: 301-480-6227; e-mail: milstien@codon.nih.gov. NIH is an Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available for a Ph.D. to study the molecular pathogenesis of hepatitis viruses. Individuals with a background in molecular biology, tissue culture, and working with animals are encouraged to apply. Research focuses on creating a mouse with a human liver to study the pathogenesis of hepatitis C virus, mapping genetic determinants of virulence of hepatitis A and C virus, and *in vitro* characterization of virus-host interactions. Please send curriculum vitae to: Dr. Ann Funkhouser, 5841 South Maryland Avenue, Chicago, IL 60637. E-mail: afunkhou@peds.bsd.uchicago.

POSITIONS OPEN

POSTDOCTORAL TRAINING in brain microtumor immunotherapy (Immunol. Today 19:17, 1998). Candidate should be experienced in establishing and engineering rat T cell lines. Available immediately. Please give reason for your interest, relevant experience, and list of English-language publications. Apply to: Dr. L. Lampson, Harvard Institutes of Medicine, 77 Avenue Louis Pasteur, Boston, MA 02115.

POSTDOCTORAL POSITION is available in the Laboratory of Cellular Oncology, National Cancer Institute, National Institutes of Health. Research group works on oncogenes and tumor suppressors involved in myeloid leukemia. Position will focus particularly on the development of leukemia models based on gene targeting in the mouse using homologous recombination. A strong background in molecular biology and cell biology is essential. Salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Linda Wolff, Head, Leukemogenesis Section, NCI, Building 37, Room 2D11, 37 Convent Drive MSC 4255, Bethesda, MD 20892-4255. E-mail: Iwolff@helix.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is available immediately to do NIH-funded research on growth factors and transmitters in pain transmission. Candidates must have a Ph.D. degree or equivalent by the time of appointment with preference for experience in molecular biology, autoradiography, immunohistochemistry, or behavior. Send curriculum vitae, three letters of reference, and summary of expertise to: Dr. Alice A. Larson, Ph.D., Graduate Program in Neuroscience, University of Minnesota, 1988 Fitch Avenue Room 295, St. Paul, MN 55108 USA. Position will be open until a qualified applicant is identified. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION is available immediately to develop a high temperature-pressure bioreactor for growth studies of new extremophiles. Experience culturing extremophiles desired with a Ph.D. in chemical engineering, microbiology, or related field. One-year appointment with possibility of extension. Salary commensurate with experience. Send résumé and three references by August 31, 1999, to: Prof. Douglas S. Clark, Department of Chemical Engineering, University of California, Berkeley, CA 94720. The University of California is an Equal Opportunity/Affirmative Action Employer.

AWARDS

UNIVERSITY OF REGINA

The Department of Chemistry and Biochemistry invites applications for a University Faculty Award (UFA) from the National Sciences and Engineering Research Council (NSERC) of Canada. Candidates should have an active research program in either (a) the chemistry of non-aqueous solvents (ionic liquids, supercritical CO2, etc.) or (b) electrocatalysis and scanning electrochemical microscopy.

The Award, which is only available to women who are Canadian citizens or permanent residents of Canada, is concomitant with a tenure-track Assistant Professorship of physical or analytical chemistry, beginning July 2000

Applicants should hold a Ph.D. degree and have at least two years of postdoctoral experience. The appointee is expected to teach at the undergraduate and graduate levels as well as carry out research. Applications should include a research proposal (NSERC format) and the names and addresses of three referees. They should be sent before August 27, 1999, to: Dr. K. E. Johnson, Department of Chemistry, University of Regina, Regina, Saskatchewan S4S 0A2 Canada. E-mail: kejohnso@cas.uregina.ca. UFA details are obtainable from website: http://www.nserc.ca/programs/schol4_e.htm.

The University of Regina is committed to Employment Equity and encourages applications from aboriginal applicants, persons with disability, and visible minority candidates.

POSITIONS OPEN

RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

Plant Ecologist sought to investigate long-term change in composition of plant communities on shrub-dominated landscapes in the Rocky Mountains. Duties: Field sampling, data compilation and analysis, publication. Ph.D. in botany or ecology.

Salary: \$36,000 per 12 months plus benefits. Application deadline September 15, 1999. Send letter of application, curriculum vitae, and contact information for three references to: Arlene Boaman, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, CO 80523-1499. Colorado State University is an Equal Employment Opportunity/ Affirmative Action Employer.

FELLOWSHIP

POSTDOCTORAL FELLOWSHIP IN IMMUNOLOGY

Immediate openings exist at the University of California, San Diego for full-time NIH-funded Postdoctoral Training Fellowship in immunology for M.D. or Ph.D's. Areas of interest include autoimmunity, allergy, and cancer. Applicants must be U.S. citizens or permanent residents. Send inquiries to: N. Noon, Department of Medicine, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0663. FAX: 858-534-5399; e-mail: nnoon@ucsd.edu. UCSD is an Affirmative Action/Equal Opportunity Employer.

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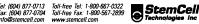
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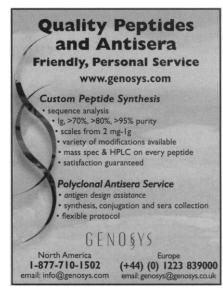
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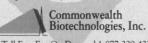


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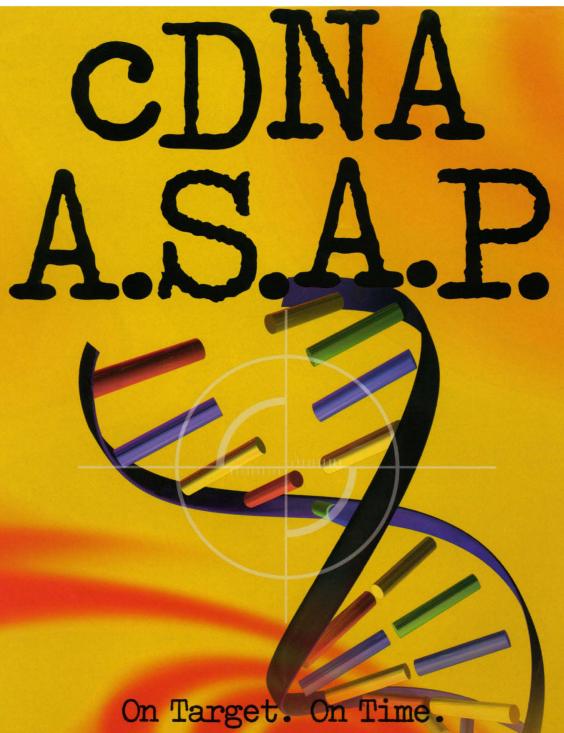
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