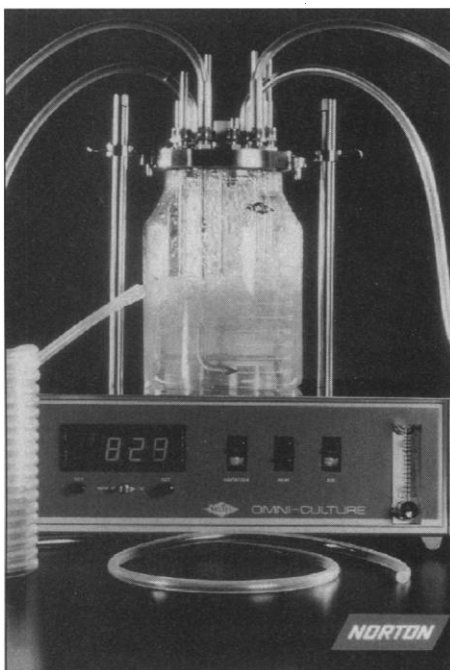


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PRODUCTS



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Antibodies

The monoclonal antibody (mAb) CCP58, which can be used to stain Mucin-2, stains positive for colon gastric cancer cells, normal intestine, colon and salivary glands, and some human colon carcinoma cell lines. The mAb HRS-4 can be used for immunohistochemical staining of CD30; CD30 is expressed by Reed-Sternberg cells in Hodgkin's lymphomas, cells of anaplastic large cell lymphoma, and lymphomatoid papulosis. Another antibody, part of a new product

group of epitope specific polyclonals, reacts with isoforms of vascular endothelial growth factor, a cytokine that induces endothelial proliferation and increases endothelial permeability. A polyclonal antibody reacts specifically with c-fos, a regulatory transcription protein expressed in many cell types in response to mitogenic signals. All these antibodies can be used in formalin-fixed, paraffin-embedded tissue sections. BioGenex. For information call 800-421-4149 or circle 139 on the reader service card.

Scientific Graphing Software

GraphPad Prism is a software package for analyzing and graphing scientific data that is available in both Macintosh and Windows versions. It combines graphing, curve fitting, and biostatistics. Prism maintains the links between data, analyses, and graphs, so even the most complicated experiments stay organized and easy to manage. Prism can automate routine analyses and graphing procedures. GraphPad Software. For information call 612-824-9101 or circle 140 on the reader service card.

Luminescence Kits

New applications of the bioluminescent luciferase reaction include three easy-to-use kits: the Cytotoxicity and Cell Proliferation, Luciferase Monitoring, and ATP (adenosine triphosphate) Monitoring kits. The Cytotoxicity and Cell Proliferation Kit is an alternative to tritiated thymidine. It gives results of cell growth and death in minutes by measuring ATP in all metabolically active cells. The Luciferase Monitoring Kit measures transcriptional activity in systems in which the firefly luciferase gene is used as a reporter gene. The ATP Monitoring Kit measures ATP on bacterial, plant, or animal cells. Labsystems. For information call 800-654-9955 or circle 141 on the reader service card.

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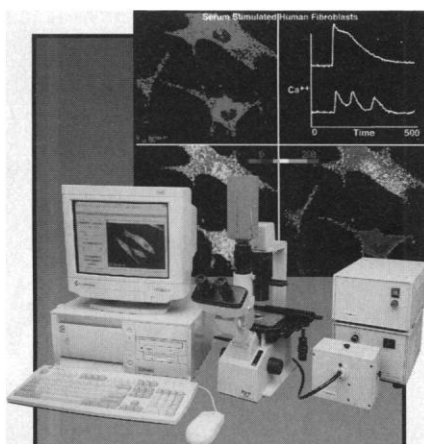
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ants. **FMC BioProducts**. For information call 800-521-0390 or circle 142 on the reader service card.

Diffuse Reflectance Accessory

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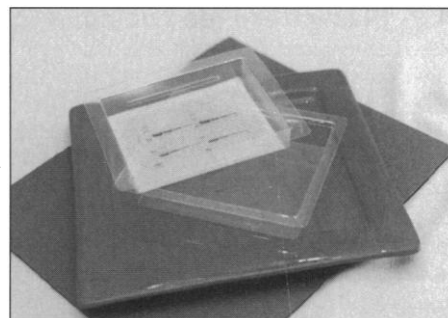
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The EconoStain System is for staining and destaining of polyacrylamide minigels. A gel strainer supports the gel in a clear plastic staining tray, making it easy to change stain-



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Literature

Invitrogen 1997 Product Catalog provides information on more than 300 products for gene expression and analysis research. Products include cloning and expression vectors, nucleic acid purification kits, gene transfer products, expression systems, polymerase chain reaction products, and custom services. **Invitrogen**. For information call 800-955-6288 or circle 147 on the reader service card.

1997 Epicentre Catalog covers products for purification and recovery of nucleic acids, polymerase chain reaction and other amplification methods, nucleic acid sequencing, mutation detection and DNA repair, transcription research, molecular cloning, and protein research. **Epicentre Technologies**. For information call 800-284-8474 or circle 148 on the reader service card.

Introduction to Gas Chromatography (GC) is computer-based lab training software that provides an extensive GC overview, including the chromatographic separation process, types of chromatography, equipment and components, mobile and stationary phases, columns, inlets, temperature programming, detection systems, and data handling. **Savant**. For information call 800-472-8268 or circle 149 on the reader service card.

Guide to Derivatizing Agents for GC offers practical information on the use of alkylation, acylation, and silylation derivatization for gas chromatography (GC). The guide features a reagent selection table based on the functional group of the compound being derivatized, a trouble-shooting section, and tips on preparing lab equipment for use in derivatization. **Supelco**. For information call 800-247-6628 or circle 150 on the reader service card.

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The successful candidate should have an M.D. or Ph.D. degree, substantive research and administrative experience, familiarity with government and other granting agencies, demonstrated research productivity, experience in graduate education, and strong interpersonal and communication skills. The successful candidate should qualify for a tenure-track position at a senior rank in an academic department. Salary will be commensurate with experience.

Nominations and/or applications should be submitted by September 1, 1997 to: James L. Voogt, Ph.D., Chair, Search Committee, School of Medicine, 3025 Murphy, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7300. An Equal Opportunity/Affirmative Action Employer.

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For a copy of the complete job posting please consult the NMERI website at: <http://nmri.unm.edu>, or call: 505-277-5521. For best consideration applications should be received by August 1, 1997, however, applications will be accepted until the position is filled. The University of New Mexico is an Equal Opportunity/Affirmative Action Employer and Educator.

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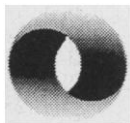
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A position is available to identify novel growth factors and their receptors and study their functions and effects on cellular signal transduction. See J. Biol. Chem. 271:9785-9789 (1996); Cell 82:355-358 (1995). Manager: Dr. Paul Godowski. Job Code SCI0175

A position is available to identify novel cell surface receptors and their ligands and to study receptor biology and cell signaling in a variety of systems including growth hormone, flt4 and gp130 receptors. See PNAS 93:1998 (1996); JBC 270:10915 (1995); JBC 270:7021 (1995); Science 253:1278 (1991). Manager: Dr. William Wood. Job Code SCI613

Neuroscience

A position is available to study the molecular and cellular biology of central nervous system neurons using primary explant cultures and molecular biology. See Nature 382:80 (1996); Nature 382:76 (1996); Cell 80:95; Nature 373:339 (1995); Neuron 15:35 (1995). Manager: Dr. Arnon Rosenthal. Job Code SCI824

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A position is available to be involved in a series of studies to investigate the identity of components and the nature of interactions between those components present in the junctional tight complex which is found between adjacent epithelial cells. Strong communication skills, as well as a background in intestinal or pulmonary epithelial cell function or brain endothelial are desirable. See Am. J. Physiol., in press, (1997); J. Clin Invest, in press (1997); Am. J. Physiol., 269:L561-566 (1995); J. Biol. Chem. 270:25102-25106 (1995); J. Biol. Chem., 268:19070-19075 (1993); J. Clin. Invest., 91:2320-2325 (1993). Manager: Dr. Randy Mrsny. Job Code SCI390

Immunology

A position is available to investigate lymphocyte cell surface protein interactions with endothelial cells associated with inflammatory diseases. See J. Immunol. 155:5257 (1995); J. Cell Biology 125:1395 (1994); J. Biol. Chem. 269:14411 (1994). Manager: Dr. Sherman Fong. Job Code SCI620

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A position is available to develop new tools for the assessment of performance of manufacturing operations and of the scalability of these operations. Requirements include a PhD in Chemical Engineering or a related field. Experience with statistical techniques for the retrospective analysis of process data, mass spectrometry or optical biosensor technology preferred. See Biochem. 35:1897-1903 (1996). Manager: Dr. John Frenz. Job Code SCI270

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A position is available to assess the safety and mechanism of toxicity of exogenously administered human growth factors on tumor initiation, promotion, growth and metastasis. Experience or knowledge of tumor biology, laboratory techniques, animal handling, and with in-vivo and in-vitro tumor models is required. See Cancer Res. 56:921-924 (1996); Ann Intern Med. 122:54-59 (1995); Cancer Res. 55:249-252 (1995); J. Clin. Invest 95:1789-1797 (1995); Am. J. Clin. Pathol. 92:415-423 (1989); J. Histochem Cytochem 36 (4):383-389 (1988). Manager: Dr. Jeanine Bussiere. Job Code SCI535

Protein Engineering

A position is available for a structural biologist with experience in crystallography and biophysical techniques. The work will also involve mutagenesis and protein biochemistry. See J. Mol. Biol. 256, 144-159 (1996); J. Mol. Biol. 250:553-570 (1995); Nature 372:478-481 (1994); Prot. Sci. 3:1697-1705 (1994). Managers: Dr. Tony Kossiakoff and Dr. Bart de Vos. Job Code SCI0014

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The successful candidate for this position will have demonstrated an excellent publication record, a Ph.D. in Animal Physiology or Pharmacology or a D.V.M./Ph.D., and at least 2 years of clinical and research experience. Extensive experience with *in vivo* animal experimentation and knowledge of or experience in pharmacology/toxicokinetics of nucleic acids is required. Experience with relevant federal regulations is desirable. Candidates should also have excellent oral and written communication skills, experience working within interdisciplinary teams and competency with statistical analyses of data.



GENEMEDICINE, INC.

CLINICIAN/ SCIENTIST

Gillette Research Institute, a division of The Gillette Company, seeks a Clinician/Scientist who will lead an interdisciplinary research team in the development of consumer healthcare devices.

Candidates should have experience in health care and health care technologies, with a strong background in basic physical sciences and/or engineering. An M.D. degree is required.

Gillette Research Institute is located in a facility outside Washington, D.C. in a region that includes a wide variety of government, private and academic scientific laboratories. We offer excellent compensation and benefits package. Qualified candidates should forward a resume to:

Gillette Research Institute
Human Resources Dept. - S
401 Professional Drive
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Awards provide U.S. and Canadian scientists with \$500,000 to support their advanced postdoctoral training and initial faculty appointment

Announcing BWF's 1997 Career Award Recipients

Awards Provide U.S. and Canadian scientists with \$150,000 for research training in the United Kingdom or Ireland

Burroughs Wellcome Fund
4709 Creekstone Dr., Suite 100
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E-mail: info@bwfund.org

BIOMEDICAL
FUNDING OPPORTUNITIES

CAREER AWARDS IN THE BIOMEDICAL SCIENCES

Support for researchers in the basic biomedical sciences, including researchers in reproductive science, is available through BWF's Career Awards in the Biomedical Sciences. The competitive awards, open to U.S. and Canadian postdoctoral scientists, provide support ranging from \$412,500 for four years to \$532,400 for six years to fund the advanced postdoctoral years and the first three years of faculty service. At least 18 awards will be made. Recipients may spend part of the award period at an institution in the United Kingdom or Ireland. *The application deadline for the 1998 career awards is October 1, 1997.*

In 1997, BWF made 19 Career Awards in the Biomedical Sciences, including three awards in reproductive science—a total investment of approximately \$9.5 million to help outstanding biomedical scientists early in their careers develop as independent investigators.

The 1997 awardees are: Mark Bix, Ph.D., University of California-San Francisco School of Medicine; Brendon Cormack, Ph.D. (Canadian*), Stanford University School of Medicine; Gregory DeAngelis, Ph.D., Stanford University School of Medicine; Joseph Gogos, M.D., Ph.D., Columbia University College of Physicians and Surgeons; Alan Hunt, Ph.D., University of Colorado; Raymond Jacobson, Ph.D., University of California-Berkeley; Suzanne Kirby, M.D., Ph.D., University of North Carolina-Chapel Hill School of Medicine; Scott Kogan, M.D., University of California-San Francisco School of Medicine; Margarethe Kuehn, Ph.D., University of California-Berkeley; Zachary Mainen, Ph.D., State University of New York-Stony Brook; Kelsey Martin, M.D., Ph.D., Columbia University College of Physicians and Surgeons; Robert Menard, M.D., Ph.D., New York University Medical Center; James Olson, M.D., Ph.D., University of Washington School of Medicine; Martin Pavelka, Ph.D., Albert Einstein College of Medicine; Martin Pollak, M.D., Harvard Medical School; and David Sullivan Jr., M.D., Washington University School of Medicine.

The 1997 awardees specializing in reproductive science are: David Cummings, M.D., University of Washington School of Medicine; Mala Mahendroo, Ph.D., University of Texas Southwestern Medical Center-Dallas; and Carmen Williams, M.D., University of Pennsylvania School of Medicine.

**BWF in previous years has made career awards to two other Canadian citizens.*

HITCHINGS-ELION FELLOWSHIPS

These fellowships support U.S. and Canadian postdoctoral scientists for two years of research training in the United Kingdom or Ireland and a third year in the United States. Fellows may work in the basic biomedical sciences and in the behavioral sciences (with biomedical relevance). The competitive awards provide \$50,000 per year for salary, research expenses, and travel. Up to 10 fellowships will be awarded. *The application deadline for the 1998 fellowships is September 2, 1997.*

ADDITIONAL BWF FUNDING OPPORTUNITIES

Several other award programs may be of interest to U.S. and Canadian scientists. BWF offers awards in the pharmacological and toxicological sciences, in translational research that connects the laboratory bench and patient care, and in emerging infectious diseases (molecular parasitology, malaria, and molecular pathogenic mycology).

The Burroughs Wellcome Fund is an independent private foundation established to advance the medical sciences by supporting research and other scientific and educational activities.

Program information is available on BWF's website at <http://www.bwfund.org>

**VICTORIA UNIVERSITY
OF WELLINGTON
NEW ZEALAND**

*Te Whare Wananga
o te Upoko o te Ika a Maui
Aotearoa*



**Lectureship
in Ecology**

Applications are invited for a Lecturer in Plant Community Ecology within the School of Biological Sciences.

The position is a permanent one subject to a probationary period. The successful candidate will be expected to develop an active research programme, supervise graduate students, teach in advanced courses in Plant Ecology and be responsible for a team taught, cross-disciplinary course in Introductory Ecology. We expect the appointee to have a PhD, publications, an ability to work well with others and some teaching experience.

We particularly welcome applicants with strong quantitative skills, interests in Conservation Biology and plant-animal interactions, a documented ability to obtain external funding and experience supervising graduate students. We are prepared to consider appointment at Senior Lecturer level if the candidate has an exceptional degree of experience. Due to an essential teaching commitment at the end of February, the appointee must be available from early February 1998.

Closing date for applications, including resume and names and addresses of at least three referees, is 8 August 1997. Conditions of appointment and method of application are available from the HR Adviser, Faculty of Science, Victoria University of Wellington, PO Box 600, Wellington, New Zealand, fax: 64-4-495 5122, email: Science-appoint@vuw.ac.nz. Enquiries can be made to Dr Charles Daugherty, School of Biological Sciences, fax: 64-4-471 5331, email: Charles.Daugherty@vuw.ac.nz

In honouring the Treaty of Waitangi, the University welcomes applications from the Tangata Whenua. We also welcome applications from women, Pacific Islands peoples, ethnic minorities and people with disabilities.

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Our drug research and scientific discoveries have reached around the globe to make Parke-Davis Pharmaceutical Research an industry leader. We've redesigned the process of drug discovery, development and marketing to insure even more advancements in the next century and beyond. Currently, we are seeking an Associate Scientist/Senior Associate Scientist to join us in Ann Arbor, MI.

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As a valuable member of our research team, you will be involved in drug discovery and development in the area of in vitro drug metabolism. The responsibilities include evaluation and examination of NCE's and their effects on drug metabolizing enzymes, using a variety of in vitro techniques with animal and human tissue. A BS or MS in a biological science or related area and laboratory experience in drug metabolism are required. HPLC experience as well as a knowledge of drug metabolizing enzymes systems are also required. Experience in enzyme preparations, SDS-PAGE/western or northern blotting, LC/MS or enzyme kinetics would be an asset. Ability to work in a team environment along with excellent communication skills is essential.

Join our team of professionals and broaden your scientific career with Parke-Davis. Enjoy a new level of research freedom, competitive salaries, benefits and career growth potential. For consideration, mail, fax or e-mail resume* and cover letter to: **Parke-Davis Pharmaceutical Research, Human Resources Department, Job Code: RB-97173, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (313) 998-3394. E-mail: resume@aa.wl.com**

*Submit resume on laser-quality white paper, with legible 10 point or larger type, and avoid boldface, italics, borders, etc.



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PARKE-DAVIS

Strategic Research Assessment Scientist

Pharmacia & Upjohn is one of the world's largest research-based pharmaceutical companies. We are involved in areas such as Oncology and Infectious, Metabolic, Inflammatory and Central Nervous System Diseases to help people live longer and fuller lives. If you would like an opportunity to make a difference with Pharmacia & Upjohn, contact us.

A specialist with an Infectious Diseases orientation is being sought to join the Strategic Research Assessment team. This role is responsible for determining the strategic implications of competitor activities, compounds and technologies in the area of infectious diseases, by utilizing personal scientific acumen together with primary (professional networks) and secondary sources of information. This will involve assessments of competitor's core competencies and therapeutic focus. The individual will also be expected to identify emerging technologies and novel therapeutic approaches relevant to infectious diseases research and drug development.

Position requires a minimum of a Ph.D. or M.D., with at least 5 years of pharmaceutical industry experience

preferred, or a Master's Degree with at least 10 years pharmaceutical industry experience. Incumbent must be able to demonstrate mastery of scientific, technical and analytical skills and proficiency in interpretation of scientific literature. Excellent organizational and interpersonal skills are essential. Some travel will be required.

At Pharmacia & Upjohn you can make a difference. Not only for the sake of your career, but also for the millions of people around the world whose lives will be enhanced by the solutions you help us provide. Pharmacia & Upjohn, Inc. offers a competitive salary and benefits.

For confidential consideration please send your resume to: **Recruiting Office, Pharmacia & Upjohn, Position #970281, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001, or e-mail to: recruit@am.pnu.com, no attachments please. We are an equal opportunity employer with a commitment to workplace diversity.**



Pharmacia & Upjohn

Scientists

Novel Technologies Group



Located in the San Francisco Bay Area, **Avigen** is a leader in the development of gene therapy based on adeno-associated virus (AAV) for the treatment of inherited & acquired diseases. We are developing versatile gene delivery technologies that can be applied to numerous disease targets, taking advantage of the rapid advances being made in the identification of genes associated with human disease.

Currently, we have a great opportunity for a number of hands-on researchers to join our expanding Novel Technologies Group, which develops new gene delivery systems with capabilities not currently available. The group functions in an open and interactive manner and the publication of scientific results is encouraged. Candidates should have a Ph.D. or MD and at least 2 years of postdoctoral experience in a relevant field.

Gene Delivery

This research scientist will develop non-viral gene delivery vehicles. We are looking for a creative individual who can design & construct novel delivery vehicles for nucleic acids. Candidates should have extensive experience in the development of gene delivery strategies, in addition to well formulated ideas about delivery vehicle design, and a practical plan for the development of their concept. (Job# SCI0627-GD)

Gene Expression

We are looking for scientists with knowledge/experience in gene expression to develop systems for tissue specific and controllable gene regulation for inclusion into our gene delivery vectors. (Job# SCI0627-GE)

Apoptosis

We're looking for a research scientist with a strong background in the field of apoptosis. The successful candidate will design & develop proteins capable of initiating apoptosis in response to an external signal. Expertise in protein design, protein structure/function, receptor biology, or signal transduction is desirable. (Job# SCI0627-A)

Integration

This experienced research scientist will develop systems capable of directing the integration of large transgenes into the chromosomes of target cells. We are looking for a creative individual with a background in DNA integration or recombination to develop novel transgene integration systems for use in human gene therapeutics. (Job# SCI0627-I)

Bioinformatics

We intend to take advantage of genomic & EST databases to identify novel therapeutic genes and regulatory regions for the next generation of gene-based therapeutics. As such, we are looking for a scientist with prior experience in retrieval and analysis of genomic information to spearhead these efforts. (Job# SCI0627-B)

We offer competitive salaries & benefits, generous stock options, and an exciting opportunity to join 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**, (Attn: Job#), 1201 Harbor Bay Parkway, Suite 1000, Alameda, CA 94502; Email: lacroix@avigen.com; Fax: (510) 748-7155.



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NATIONAL CANCER INSTITUTE NATIONAL INSTITUTES OF HEALTH, PUBLIC HEALTH SERVICE CANCER PREVENTION FELLOWSHIP PROGRAM

The Division of Cancer Prevention and Control (DCPC), NCI, is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of the program is to train individuals from a multiplicity of health science disciplines in the field of cancer prevention and control. The program provides for: Master of Public Health training (at accredited one year university programs); Participation in the DCPC Cancer Prevention and Control Academic Summer Course (open to physicians and scientists interested in specialized instruction on the principles and practice of cancer prevention and control); Working at DCPC directly with individual preceptors on cancer prevention and control projects; Brief field assignments in cancer prevention and control programs at other institutions. Funding permitting, Fellows will be accepted for up to three years of training, beginning July 1, 1998. Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

ELIGIBILITY

M.D., D.D.S., or D.O. from a U.S., territorial, or Canadian Medical School. Foreign medical graduates must have current USMLE or ECFMG certification and appropriate experience, e.g., one year residency in a training program approved by the Accreditation Council for Graduate Medical Education.

OR

Ph.D. or other doctoral degree in a related discipline (epidemiology, biostatistics, and the biomedical, nutritional, public health or behavioral sciences). Foreign education must be comparable to that received in accredited U.S., territorial, or Canadian institutions.

PLUS

The applicant must be a citizen or resident alien of the United States eligible for citizenship within four years. For details and an application catalog either call, fax, e-mail, or send a postcard or letter with your name, home address, and where you heard about the program to:

Douglas L. Weed, M.D., M.P.H., Ph.D.

Director

**Cancer Prevention Fellowship Program
Division of Cancer Prevention and Control
National Cancer Institute**

Executive Plaza South, Suite T-41

6130 Executive Blvd. MSC 7105

Bethesda, MD 20892-7105

Further Inquiries: Mrs. Barbara Redding

Telephone (301) 496-8640

Fax (301) 402-4863

Email reddingb@dcpcpn.nci.nih.gov

Deadline for receipt of applications: September 1, 1997

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POSITIONS OPEN

FACULTY POSITION THE DEPARTMENT OF PATHOLOGY AND THE CELL ADHESION AND MATRIX RESEARCH CENTER

The University of Alabama at Birmingham

The Department of Pathology and The Cell Adhesion and Matrix Research Center invite applications from qualified candidates for a full-time, tenure-track faculty position at the rank of **ASSISTANT or ASSOCIATE PROFESSOR** in the Department of Pathology. The successful candidate must hold a Ph.D. or M.D./Ph.D. degree and have postdoctoral experience with a record of publications in mainstream journals. He/she will be expected to establish an independent, extramurally-funded research program and to participate in departmental and graduate education activities of the Molecular and Cellular Pathology Graduate Program and the Cell Adhesion and Matrix Research Center. Candidates with expertise in molecular mechanisms of cell adhesion are especially welcome to apply. A competitive salary, newly renovated laboratory space, and start-up package are available. UAB is ranked in the top 20 institutions in NIH-funded research and offers a highly interactive environment with state-of-the-art facilities. Applicants should submit a current curriculum vitae with a statement of research interests, and three letters of reference to: **Joanne E. Murphy-Ullrich, Ph.D., Chair, Search Committee, Department of Pathology, G038 Volker Hall, 1670 University Boulevard, Birmingham, AL 35294-0019.** Applications must be received by August 15, 1997. *UAB is an Affirmative Action/Equal Opportunity Employer. Women and minority applicants are encouraged to apply.*

TENURE-TRACK FACULTY POSITION IN PHARMACOLOGY EAST TENNESSEE STATE UNIVERSITY

The Department of Pharmacology is seeking a molecular biologist to complement ongoing research in cardiovascular pharmacology and neurobiology. Appointment will be at the rank of **ASSISTANT or ASSOCIATE PROFESSOR**. Candidates must have a Ph.D. and/or M.D., at least two years of postdoctoral training, and an active research program. Applicants at the assistant professor level should demonstrate a strong potential for obtaining extramural funding, while those at the associate professor level are expected to have current extramural research support. Additional responsibilities will include teaching medical students and graduate students in our Biomedical Science Graduate Program. The College of Medicine offers a competitive salary and start-up funds.

Please send a concise statement of research interests, your curriculum vitae, and the names and addresses of three references to:

John C. Hancock, Ph.D.
Department of Pharmacology
James H. Quillen College of Medicine
East Tennessee State University
Johnson City, TN 37614-0577

Review of applications will begin in June and continue until the position is filled. *East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITIONS IMMUNOGENETICS

The newly reorganized Department of Microbiology and Immunology at Vanderbilt University is continuing to expand its research base in molecular biology of the immune system with a special emphasis on immunogenetics. New tenure-track positions at the **ASSISTANT PROFESSOR** level are available. In exceptional cases faculty positions at the **ASSOCIATE PROFESSOR** and **PROFESSOR** levels will be considered. The candidates should have experience in applying molecular biology approaches to the problems within the area specified above. Start-up funds and newly renovated space are available. Faculty members holding Ph.D. and/or M.D. degrees will have academic appointments in the School of Medicine and in the Graduate School of Vanderbilt University. Send applications with curriculum vitae, present and future research plans, and at least three names of references to: **Jack J. Hawiger, Professor and Chairman, Department of Microbiology and Immunology, Vanderbilt University School of Medicine, A-5321 Medical Center North, Nashville, TN 37232-2363.**

Women and minorities are encouraged to apply. Vanderbilt University is an Equal Opportunity/Affirmative Action University. Review of applications will begin immediately and continue until positions are filled.

POSITIONS OPEN

The Cancer Center and the Department of Microbiology at Michigan State University offer a tenure-track position in carcinogenesis at the **ASSISTANT/ASSOCIATE PROFESSOR** level.

Outstanding applicants are sought who have a Ph.D. degree or equivalent, postdoctoral research experience, and a record of excellence in research. The successful applicant will be expected to establish a strong, extramurally funded research program in an area related to cancer genetics, cellular and/or molecular mechanisms underlying neoplastic transformation and/or tumor progression, or growth factor- or hormone-regulated growth control. A strong commitment to undergraduate and graduate education is essential, as is a willingness to interact and develop collaborations with other members of the Cancer Center faculty.

Michigan State University has made major commitments to its new Cancer Center, which currently has active research programs in carcinogenesis, breast cancer, and the control of gene expression and DNA replication. The academic appointment will be in the Department of Microbiology, and is available as of January 1, 1998. For interested candidates, a joint appointment in a clinical department can also be arranged. Salary will be commensurate with the qualifications and experience of the candidate, and a competitive package of start-up funds will be provided.

Applicants should send a curriculum vitae, a complete list of publications and external research support, a description of research interests, relevant reprints and preprints, and have three reference letters sent by October 1, 1997 to: **Michele M. Fluck, Chair, Carcinogenesis Search Committee, Giltner Hall, Michigan State University, East Lansing, MI 48824-1101.** This position will remain open until filled.

Michigan State University is an Affirmative Action/Equal Opportunity institution. Women and minorities are encouraged to apply.

FACULTY POSITION IN VASCULAR BIOLOGY

Applications are invited for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level in the Department of Physiology at the University of Connecticut School of Medicine in the broad area of vascular biology. This recruitment is to enlarge a multidisciplinary program that aims to bridge clinical and basic science problems in vascular biology. Preference will be given to candidates with strong records in cell and molecular biology/biochemistry using modern methods. Areas of interest include cell and molecular biology of the vascular endothelium or smooth muscle, extracellular matrix biology, vascular development, and transcriptional regulation. The successful candidate will be expected to develop an independent, externally funded research program, and participate in the teaching program. To apply, send curriculum vitae, description of research interests, and the names of three individuals who might write in your behalf before September 15, 1997 to: **Timothy Hla, Ph.D., Chair, Vascular Biology Search Committee, Department of Physiology, University of Connecticut School of Medicine, 263 Farmington Avenue, Farmington, CT 06030-3505.** (Search Code 95-158). *An Affirmative Action/Equal Opportunity Employer. Minorities/Females/Persons with Disabilities/Veterans.*

RESEARCH FACULTY

The Department of Pediatrics of the University of Pennsylvania School of Medicine, The Children's Hospital of Philadelphia, is recruiting for a **RESEARCH ASSISTANT PROFESSOR** in the Division of Endocrinology/Diabetes with knowledge in molecular and cellular biology with a research focus on growth factors. Address replies with curriculum vitae to: **Thomas Moshang, Jr., M.D., Division Chief—Endocrinology/Diabetes, 34th and Civic Center Boulevard, Philadelphia, PA 19104.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

The Department of Pathology, Case Western Reserve University, invites applicants for a tenure-track **ASSISTANT PROFESSORSHIP** to do research in cytokine regulation of neonatal and adult immune responses. Applicants should have relevant publications, and preferably be trained in pathology. Send curriculum vitae, research interests and plans, and names of three references to: **M. E. Lamm, M.D., Department of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106-2622.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

EVOLUTIONARY BIOLOGIST

The Department of Zoology seeks an evolutionary biologist specializing in computer modeling and digital evolution. The faculty member will strengthen our graduate program in evolutionary biology, ecology, and conservation biology and should complement faculty interests in these areas. The primary teaching responsibility will be one undergraduate or graduate course each semester.

Candidates must have a demonstrated ability to conduct significant independent research as judged by publications, a record of good teaching with interests in both undergraduate and graduate education, and a Ph.D. Preference will be given to candidates with postdoctoral experience and with an interest in interdisciplinary scholarship.

Applications must include a complete curriculum vitae, reprints of published papers, a description of research interests, a description of teaching experience and philosophy, and four letters of evaluation. The applicant should also list the names and telephone numbers of the individuals asked to send recommendation letters.

The appointment will be made at the level of **PROFESSOR** and the salary will be commensurate with that rank. Screening of candidates will begin 1 July 1997 and will continue until the position is filled.

Applications should be sent to: **James N. Thompson, Jr., Chair, Department of Zoology, University of Oklahoma, Norman, OK 73019.** Telephone: 405-325-4821; FAX: 405-325-7560. *An Equal Opportunity/Affirmative Action Employer. OU has a policy of being responsive to needs of dual-career couples.*

INFORMATICS. The Department of Laboratory Medicine, University of Washington School of Medicine, is seeking an individual to head the Division of Medical Informatics and Laboratory Processing at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Minimum requirements include an M.D. degree with board certification in clinical pathology, advanced training in informatics/computer science, and experience in clinical chemistry. The successful candidate will be expected to manage a hospital-based laboratory information system, maintain current computer and communication technologies, and teach at the undergraduate, graduate, and postdoctoral levels. Rank and salary will be commensurate with credentials and experience. Review of applications will begin immediately and will continue until position is filled. *The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates.* Interested applicants should submit a letter of interest and a detailed curriculum vitae to: **James S. Fine, M.D., Chairman, Department of Laboratory Medicine, University of Washington, Box 357110, Seattle, WA 98195-7110.** *The University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION YALE MEDICAL SCHOOL

The Section of Nephrology, Yale University School of Medicine, and the West Haven VA Medical Center are seeking qualified candidates for a faculty position at the level of **ASSISTANT/ASSOCIATE PROFESSOR**. Applicants should have M.D. and/or Ph.D. degree and the capability to conduct independent research of relevance to nephrology. Individuals whose research interests include the study of ion channels are especially encouraged to apply. Applicants should forward curriculum vitae, brief statement of research goals, and three references to: **Dr. Gary V. Desir, Department of Internal Medicine, Yale University School of Medicine, P.O. Box 208029, New Haven, CT 06520-8029.** *Yale University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR in the Medical Pathology Section of the Department of Pathology and Laboratory Medicine at the University of Pennsylvania. Applicants should have an M.D. or M.D./Ph.D. with postdoctoral training in signal transduction research and be Board-certified in anatomic pathology. Interested candidates should submit a statement describing current and future research plans and a curriculum vitae, along with three references to: **Dr. J. Q. Trojanowski, Medical Pathology Section, Division of Anatomic Pathology, Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine, 3 Maloney, 3600 Spruce Street, Philadelphia, PA 19104-4283; FAX: 215-349-5909.** *The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

AWARDS

THE NATIONAL RESEARCH COUNCIL

is accepting applications for

Postdoctoral Research Associateship Awards

at the

US Environmental Protection Agency's

Atlantic Ecology Division (AED)

Narragansett, RI

The National Research Council (NRC) will offer competitive Associateship awards for research in residence at the EPA/AED. Research opportunities are in the following areas:

- Development and application of physiologically-based population models, such as individual-based models and bioenergetics models for selected estuarine fish species. For information contact Dr. Timothy R. Gleason, tel: 401/782-3033 or email: gleason.timothy@epamail.epa.gov
- Development and application of molecular approaches to assess genetic diversity in key species of estuarine/marine ecosystems. Contact Dr. Diane Nacci, tel: 401/782-3143 or email: nacci.diane@epamail.epa.gov
- Development of a general method for simplifying complex coastal ecosystems and regional environmental systems. Contact Dr. Daniel E. Campbell, tel: 401/782-3195 or email: campbell.dan@epamail.epa.gov
- Development of research approaches to identify and narrow uncertainties concerning future ecological risks in selected US Atlantic coast watersheds and associated coastal receiving waters. Contact Dr. Henry A. Walker, tel: 401/782-3134 or email: walker.henry@epamail.epa.gov
- Development of non-traditional approaches to bridge human demographic analysis and ecological systems analysis and define joint dependencies on water quantity and quality within a specific watershed. Contact Dr. Gerald Pesch, tel: 401/782-3007 or email: pesch.gerald@epamail.epa.gov

Fax for contacts listed above: 401/782-3030

Mailing address: US EPA NHEERL AED,
27 Tarzwell Drive, Narragansett, RI 02882

Applications, submitted directly to the NRC, are accepted on a continuous basis throughout the year. Those postmarked by August 15 will be reviewed in the October competition and by January 15, 1998 in the February competition.

For application materials contact:
NATIONAL RESEARCH COUNCIL
Associateship Programs (TJ2114/EN)

2101 Constitution Avenue NW

Washington, DC 20418

FAX: (202) 334-2759

EMAIL: rap@nas.edu

KINETEK

pharmaceuticals inc

SENIOR & JUNIOR SCIENTIST POSITIONS

PROGRAM DIRECTOR - ONCOLOGY

This individual will play an important role in overseeing our cancer focused, protein kinase drug target identification and drug discovery programs. Industry project management experience is desirable. Knowledge of signal transduction and tumour biology, and an M.D. or Ph.D. degree with clinical experience are required. Excellent interpersonal, management and communication skills are necessary. (Job Code: OPD706)

Ph.D. SCIENTISTS/POST-DOCTORAL FELLOWS

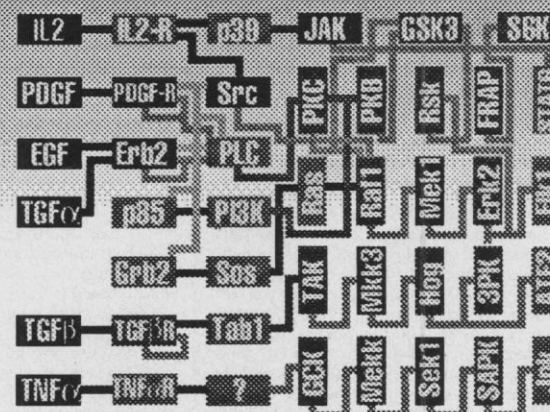
These individuals will participate in our protein kinase identification and drug target validation programs. Previous industry experience is desired. Working knowledge of protein phosphorylation is a must. Excellent interpersonal and communication skills are required. One of the areas of expertise should include:

- Enzyme purification and protein biochemistry (Job Code: PDS706A)
- Molecular biology, recombinant protein expression and antisense approaches to drug target validation (Job Code: PDS706B)
- Organ, tissue or cell-based bioassays with diabetes background (Job Code: PDS706C)

Kinetek offers a progressive and creative working environment in a state-of-the-art facility with a competitive compensation package including an employee incentive stock option plan. Vancouver is a dynamic, rapidly evolving community, which offers a mild climate and a variety of desirable lifestyle options.

Further information about Kinetek can be obtained from <http://www.kinetekpharm.com> or from the address below. Applicants should quote Job Code # and send a CV with a list of publications and the names, addresses and phone numbers of three referees by July 15, 1997 to:

Kinetek Pharmaceuticals, Inc. - Human Resources,
Suite 150, 520 W. 6th Ave., Vancouver, B.C. Canada V5Z 1A1.
Facsimile: 604-876-5498.



KINETEK

Mapping and manipulating
signal transduction systems for
treatment of cancer, diabetes
and other diseases of aging.

POSITIONS OPEN

DEVELOPMENTAL BIOLOGY FACULTY POSITION VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Vanderbilt University School of Medicine invites applications for a tenure-track faculty appointment at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in developmental biology. The successful candidate will join several vigorous research groups studying signal transduction, transcriptional regulation, axonal guidance, gametogenesis, embryonic patterning, and morphogenesis. These groups employ an interspecies approach to developmental analysis, and work with *C. elegans*, *Drosophila*, zebrafish, *Xenopus*, chick, and mouse. Vanderbilt offers a highly collegial and interactive environment, with a strong Interdisciplinary Graduate Program. We seek applicants whose research program creatively addresses fundamental problems in animal development. Applicants should submit a curriculum vitae, a concise statement of research accomplishments and future objectives, and request letters from three referees to be sent by August 15, 1997 to:

Chair
Developmental Biology Search Committee
Vanderbilt University School of Medicine
C-2310 Medical Center North
1161 21st Avenue South
Nashville, TN 37232-2175

Vanderbilt University is an Equal Employment Opportunity/Affirmative Action Employer.

COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS DEPARTMENT OF MICROBIOLOGY Immunologist

Applications are invited for a tenure-track faculty position in immunology at the level of **ASSISTANT PROFESSOR**. Candidates should be qualified to establish strong independent research programs in cellular or molecular immunology. This position comes with a generous start-up package that includes access to state-of-the-art core transgenic, flow cytometry, and molecular embryology facilities as well as a multidisciplinary immunology training program. Applicants should send a curriculum vitae, statement of research interests, and three letters of reference to: **Dr. Gerald Siu, Chair, Immunology Search Committee, Department of Microbiology HHSC 639, College of Physicians and Surgeons, Columbia University, 701 West 168th Street, New York, NY 10032.**

Columbia University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST

Aviron is a biopharmaceutical company focused on disease prevention, currently in Phase III clinical trials of our live cold-adapted intranasal vaccine for influenza.

This is a superb opportunity for a qualified scientist to contribute to vaccine research and development. As a member of the RNA Virus Vaccine team you will provide leadership and hands-on experience in the generation of live attenuated virus reassortants using classical techniques and rational vaccine design, reassortant release testing, strain optimization, and process control.

To qualify you must have a Ph.D. in molecular biology or virology with one to three years of industry experience and knowledge of GLP/GMP procedures. You must have a strong background in RNA virology and biology with additional experience in RNA purification and RT-PCR techniques, and antibody-based assay methodology.

Curriculum vitae to: **Aviron, 297 North Bernard Avenue, Mountain View, CA 94043, Attn: HR #503-A; or FAX: 415-919-6610, Attn: HR #503-A.**

CURATOR OF INVERTEBRATE PALEONTOLOGY, Cincinnati Museum Center. Applicants should have interests that will take advantage of the richness of the Paleozoic invertebrate fossils in and around the Cincinnati region. Candidates will be assessed on research, publications, and grant funding. Prior experience with collections, museums, and/or public education highly desirable. Ph.D. in paleontology required. Send cover letter, résumé, and names of four references to: **Kay Bolden-White, Director, Human Resources, Cincinnati Museum Center, 1301 Western Avenue, Cincinnati, Ohio 45203.** Review of applications will begin on July 15th 1997 and continue until the position is filled. For more information, see our website: <http://www.cincymuseum.org/invpaleo.htm>. CMC is an Equal Opportunity Employer.

POSITIONS OPEN

SCIENTIST

A&PC, a rapidly expanding biotechnology company has an opening for a formulation scientist who has specialized in clinical/pharmaceutical applications. The successful candidate will perform hands-on experiments to evaluate the properties of the new formulations of novel chemical/protein entities, prepare product chemistry test protocols, and lead the transfer of the technology of such processes to a GMP manufacturing setting. A Ph.D. in physical pharmacy or a related specialty and a minimum of five years of industry experience are required.

A competitive fringe benefit package and pension plan is available. Applicants should send curriculum vitae with cover letter by June 27, 1997 to:

A&PC Human Resources
P.O. Box 130517
St. Paul, MN 55113

An Equal Opportunity Employer.

FACULTY POSITIONS NEW YORK UNIVERSITY SCHOOL OF MEDICINE

Department of Environmental Medicine

The Department of Environmental Medicine, one of the oldest designated national environmental health science centers, is seeking applicants for tenure-track or tenured faculty positions at the **ASSOCIATE** or **FULL PROFESSOR** level in any of three areas: bioinorganic chemistry, molecular carcinogenesis, and biochemical/molecular pulmonary (inhalation) toxicology. Candidates must have a demonstrated ability to obtain extramural funding. The positions will be located at the Department's Nelson Institute of Environmental Medicine, which is located approximately 40 miles northwest of Manhattan in Tuxedo, New York. Applicants should submit, by September 1, 1997, a curriculum vitae, names and telephone numbers of four references, and a two-page statement of research plans to:

Faculty Search Committee
New York University Medical Center
Nelson Institute of Environmental Medicine
57 Old Forge Road, Tuxedo, NY 10987

New York University is an Affirmative Action/Equal Opportunity Employer; we encourage applications from women and minority scholars.

RESEARCH SCIENTIST ASSOCIATE IV (ELECTROPHYSIOLOGY, MOLECULAR BIOLOGY, BEHAVIOR) \$2,216 PER MONTH SALARY Flexible Depending Upon Qualifications

Requires Ph.D. in Neurobiology or related field. Research focus on molecular, electrophysiological, or behavioral studies in the neurobiology of learning and memory. Will work in the laboratories of **Drs. Edwin Barea-Rodriguez, Brian E. Derrick, or Joe L. Martinez, Jr.** Techniques used: *in vitro* and *in vivo* electrophysiology, novel gene isolation, water maze, and olfactory learning procedures. Grant-funded position contingent upon availability of funds.

To apply: Submit completed employment application to: **Human Resources Office, 6900 North Loop 1604 West, San Antonio, TX 78249-0610. Telephone: 210-458-4250.**

UTSA is an Equal Opportunity/Affirmative Action Employer.

TOXICOLOGIST

IIT Research Institute (IITRI), a Chicago-based not-for-profit research and development organization, has an opportunity for a research biologist/toxicologist. Candidates should possess a Ph.D. in toxicology or a related discipline with a minimum of three years of experience in the conduct of GLP studies according to the FDA, EPA, or OECD testing guidelines. Prior experience in a contract lab with emphasis on developmental/reproductive toxicology is desirable. Candidates with strong publication records are preferred. We offer a competitive salary and outstanding benefits. Mail, FAX, or e-mail résumés to: **IIT Research Institute, 10 West 35th Street, Chicago, IL 60616, attn: Human Resources. FAX: 312-567-4167, e-mail: hfram@hq.iitri.com.** Equal Employment Opportunity/Affirmative Action.

POSITIONS OPEN

INSIDE SALESPERSON

Sigma-Aldrich Fine Chemicals seeks enthusiastic candidates to become part of a highly trained and motivated sales force. We provide raw materials and custom synthesis services to our leading-edge customers in the pharmaceutical, biopharmaceutical, diagnostic, and industrial markets.

Energetic, self-motivated candidate will interface with marketing in developing new accounts and increasing penetration in existing customer base. Position requires direct responsibility for increasing sales in assigned areas, negotiating large-dollar contracts and developing vendor programs with customers. Minimal travel outside the St. Louis area.

Position requirements: B.S. or M.S. degree in chemistry with emphasis in organic chemistry, biochemistry, or life sciences; strong communication and organizational skills; ability to prioritize projects; and computer literacy. Sales experience a plus.

Sigma-Aldrich Fine Chemicals, a leading supplier of bulk chemicals, is a division of Sigma-Aldrich Corporation, the world's foremost manufacturer and supplier of research chemicals, bulk chemicals, and diagnostic reagents. Our employees play a vital role in our continued success and this position offers significant growth opportunities in our rapidly growing division.

Qualified applicants should send résumé to:

Salesperson (BKL-SCI)
Sigma-Aldrich Fine Chemicals
1600 South Brentwood Boulevard
Suite 800
St. Louis, MO 63144

An Equal Opportunity Employer

PATHOLOGY ASSOCIATES INTERNATIONAL (A SUBSIDIARY OF SAIC)

Pathology Associates International (PAI) has a challenging contract opportunity available for a highly motivated professional to expand the molecular pathology capabilities at our client's renowned pharmaceutical organization. This position within our client's Anatomic Pathology Laboratory is instrumental to supporting the research and development of new therapeutic drugs.

Selected candidate possesses a minimum of a B.S./M.S. with a minimum of five plus years experience in molecular biology and pathology. Experience with tissue-based techniques such as non-isotopic *in situ* hybridization and immunohistochemistry is highly desirable.

PAI is a subsidiary of Science Applications International Corporation, an employee-owned company offering competitive salaries and excellent benefits. Individuals seeking the opportunity to work with a team of innovative scientists should submit résumé to: **PAI, Attn: Andrea Smith, 2201 West Campbell Park Drive, Suite 327, Chicago, IL 60612.** Equal Opportunity Employer. We value cultural diversity in the workplace.

RESEARCH SCIENTIST ASSOCIATE IV \$2,216 PER MONTH SALARY Flexible Depending Upon Qualifications

The University of Texas at San Antonio Division of Life Sciences seeks a person to work on a National Institute on Drug Abuse-funded project to investigate how opioid peptides influence learning at several levels of analysis, including behavioral, electrophysiological, and molecular. This position requires a doctorate in neurobiology or a related field. Experience in grant writing, conducting research, manuscript preparation, and laboratory administration is preferred. Duties include preparation of all grant-related materials, conducting research and preparation of manuscripts related to the grant, laboratory administration, and supervision of graduate and postdoctoral students.

To apply: Submit completed employment application to: **Human Resources Office, 6900 North Loop 1604 West, San Antonio, TX 78249-0610. Telephone: 210-458-4250.**

UTSA is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMIST/MOLECULAR BIOLOGIST

We seek a Ph.D. biochemist/molecular biologist to join product development team. Candidate will be expected to manage laboratory and technology affairs. Send résumé to: **Geno Technology, Inc., 3830 Washington Boulevard, St. Louis, MO 63108.**

**CASE WESTERN RESERVE UNIVERSITY
SCHOOL OF MEDICINE**

**VICE DEAN - ASSOCIATE VICE
PRESIDENT FOR
MEDICAL AFFAIRS**

Case Western Reserve University (CWRU) School of Medicine in Cleveland, Ohio, is seeking a **Vice Dean - Associate Vice President for Medical Affairs**. This position is responsible for all operational and administrative support functions of the School of Medicine. These areas include finance and planning, facilities management, research administration, personnel and administrative services, technology transfer, publications and public affairs, and affiliated hospital relations.

Candidates should have an advanced degree (preferably a doctorate) in a related field (management, medicine, etc.) and extensive administrative experience at the medical school or academic medical center level. Strong financial, planning, and interpersonal skills are a necessity.

The CWRU Medical School is one of the top ten schools in the U.S. in NIH grant awards and has an historic reputation for educational excellence.

Letters of application (including curriculum vitae and at least three references) and nominations should be addressed to:



In employment as in education, Case Western Reserve University is committed to Affirmative Action and Equal Opportunity.

**Vice Dean - Associate Vice President
for Medical Affairs
Attn: Elizabeth Jaszczak
Department of Human Resources
Case Western Reserve University
10900 Euclid Avenue
Cleveland, Ohio 44106-7047**



NEUROSCIENCE

**COME TO NIH AND
HELP SHAPE THE
FUTURE**

The National Institute of Neurological Disorders and Stroke, located in Bethesda, MD, is seeking a **Health Scientist Administrator or Medical Officer** to serve as a Scientific Review Administrator. The person holding this position will be responsible for selecting reviewers and conducting review meetings for Program Project and Clinical Research Center grants, clinical trials, and other research of particular relevance to the mission of NINDS. Successful applicants must possess a Ph.D. or M.D. (or equivalent degrees) with postdoctoral research experience, have peer-reviewed publications, and have relevant research administration experience.

The full vacancy announcement may be obtained by fax (dial 1-800-728-5627 and request document #5047) or from the NINDS web site (<http://www.ninds.nih.gov/pmb/Joblist.htm>).

This is a civil service position at a salary range of \$54,629 to \$88,396 commensurate with experience. Physicians may be eligible for a Physician's Comparability Allowance. U.S. citizenship is required.

Applicants should submit a letter of application with a brief description of career interests, along with a curriculum vitae and bibliography, to: **Mr. Luis Arvelo**, NINDS Personnel Office, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540; telephone (301) 496-6334. You may fax your application to (301) 480-0383. Applications must be postmarked by **July 28, 1997**. Refer to vacancy announcement # NS-97-35.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER.



**St. Jude Children's
Research Hospital**

ALSAC • Danny Thomas, Founder

**POSTDOCTORAL
RESEARCH ASSOCIATE**

Specific Duties/Requirements:

Conducts research with the PI; responsible for the design and conduct of specific projects. This research focuses on the role of a newly discovered proto-oncogene in the development of human leukemia, and on the normal function of this gene in growth and development.

An M.D. and/or Ph.D. in Biochemistry, Genetics, or comparable field of study is required. The applicant should be familiar with recombinant DNA and RNA methods including library screening and preparation, standard phage and plasmid techniques, Southern and Northern blotting, construction and characterization of recombinant molecules, and sequence analysis. Additional relevant techniques include basic protein analysis methods including gel electrophoresis, immunoprecipitation, Western blotting, and metabolic labeling; PCR technology; and methods involved in the expression of recombinant molecules within cells, including transfection and electroporation.

Physical Performance Requirements:

The techniques required for this position involve constant manipulation of small objects and small volumes at a laboratory bench or tissue culture hood; thus fingering, grasping, feeling, standing and repetitive motions are essential functions of the job. Instructions for individual experiments are frequently fairly detailed and involved and necessitate both talking and hearing to ensure complete understanding and communication. Equipment required for some procedures is located in common equipment rooms which are some distance from the laboratory. The operation of these machines would entail walking, standing and crouching. Finally, supplies and reagents are stored on high shelves and under counters. Access to these materials would require climbing, balancing, stooping, kneeling, crouching, reaching, pushing and lifting.

To be considered, send Curriculum Vitae to: **St. Jude Children's Research Hospital, Human Resources Dept., 332 N. Lauderdale, Memphis, TN 38101.**

Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN



DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

ARS is seeking a Botanist, GS-430-11/12, in the Plant Exchange Office of the National Germplasm Resources Laboratory, Plant Sciences Institute, Beltsville Agricultural Research Center, Beltsville, MD. Salary is commensurate with experience (GS-11: \$38,330-49,831 per annum; GS-12: \$45,939-59,725 per annum). The position involves planning and conducting national and international plant exploration and collecting trips to preserve the germplasm of agricultural and horticultural crops and crop relatives. In addition to the education and experience requirements, applicants must demonstrate the following basic knowledge, skills, and abilities: (1) knowledge of the principles, methods, techniques, and procedures of botany, plant taxonomy, and plant ecology, and (2) ability to plan and conduct investigations and analyses and interpret and document results. The following selective placement factors must be addressed: (1) knowledge of agronomic and horticultural crops, and (2) knowledge of germplasm collection techniques. For information pertaining to the position, contact **Ned Garvey** at 301-504-7511. Please call 301-344-4638 to request a copy of the vacancy announcement and any required forms. Applicants should follow the instructions on the vacancy announcement. Applications in response to this advertisement should be marked ARS-07B-149/B-7-25. Applicants must provide college transcripts and address the selective placement factors in order to receive consideration.

USDA is an Equal Opportunity Employer.

ASSISTANT PROGRAM DIRECTOR PLANT, SOIL, FOREST, OR ENVIRONMENTAL SCIENCE

The National Research Initiative Competitive Grants Program of the U.S. Department of Agriculture seeks a qualified scientist to serve as **ASSISTANT PROGRAM DIRECTOR** for grants administration in the Natural Resources and the Environment Division. Relevant disciplines include plant biology, plant physiology, plant ecology, forestry, or environmental or soil science. Candidates must have an advanced degree with major study in at least one of the areas listed above or a closely related field. It is preferable that the candidate have a Ph.D. or equivalent specialized experience. This is a competitive vacancy, open to all United States citizens. Closing date is July 28, 1997. For information on the position, contact: **Dr. Anne Datko, Division Director, National Research Initiative Competitive Grants Program, CSREES/USDA, STOP 2241, 1400 Independence Avenue S.W., Washington, DC 20250-2241. Telephone: 202-401-4871; e-mail: adatko@reusda.gov.** For information on application procedures/forms, contact: **USDA/ARS Human Resources Division, Telephone: 301-344-3960.** Vacancy Announcement WA-AG-05-97-098. USDA is an Equal Opportunity Employer.

SEXUALLY TRANSMITTED DISEASES RESEARCH

The Indiana University School of Medicine invites applications for a joint appointment at the rank of **ASSISTANT/ASSOCIATE PROFESSOR** in the Department of Medicine/Division of Infectious Diseases and the Department of Microbiology. Applicants may have an M.D. or a Ph.D. degree, and should demonstrate an ability to investigate basic mechanisms used by pathogens to cause STDs. For M.D. candidates, B.C./B.E. in infectious diseases is required. Minorities and women are strongly encouraged to apply. Indiana University is an Affirmative Action/Equal Opportunity Employer. Interested applicants please send résumé to: **Dr. Stanley M. Spinola, Department of Medicine, EH 435, 545 Barnhill Drive, Indianapolis, IN 46202-5124.**

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: **Lawrence Shattuck, M.Ed., The New England College of Optometry, The Office of Admissions, 424 Beacon Street, Boston, MA 02115.**

POSITIONS OPEN

ECOLOGIST AND MICROBIOLOGIST

We are creating an interdisciplinary team of scientists to develop biologically-based alternatives to the use of methyl bromide to fumigate soils and provide U.S. vegetable and small fruit producers with economical and highly effective means to control diseases, nematodes, and weeds. Methyl bromide has been identified as a significant stratospheric ozone-depleting chemical and its use as a soil fumigant is being phased out of agriculture by 2001. The United States Department of Agriculture (USDA), Agricultural Research Service (ARS), research team will consist of a plant pathologist, weed scientist, soil ecologist, and soil microbiologist and will identify and develop novel methods that are biologically sound and pose minimal hazards to the environment, endangered species, producers, and consumers.

To complete the team we are currently seeking a permanent full-time **ECOLOGIST** and a permanent full-time **MICROBIOLOGIST**. The ecologist will identify relationships among soil biota as related to disease management strategies and to severity of soil-borne diseases, weeds, and nematodes. The microbiologist will characterize soil microbes that impact plant health and restrict ability of soil-borne pests to affect crops. The incumbents will contribute to the development of ecologically sound integrated disease and pest management strategies for tomato, pepper, and other vegetables. These positions will be located in a new laboratory under construction in Fort Pierce, FL.

Candidates for these positions must be U.S. citizens and must address and meet specific qualification requirements defined in the Vacancy Announcement ARS-D7S-0148 (Microbiologist) or ARS-D7S-0149 (Ecologist). For information on the research program contact: **Dr. David Kaplan, Subtropical Plant Pathology Unit, U.S. Horticultural Research Lab, Orlando, FL 407-897-7300, e-mail: dkaplan@arsr.arsusda.gov.** To request a copy of the Vacancy Announcement and application packet call: **Melissa Boyette, 407-897-7312.** Applications must be postmarked by the closing date, July 14, 1997. USDA/ARS is an Equal Opportunity Employer.

PHYSICAL OCEANOGRAPHER

The Department of Oceanography at the Florida State University invites applications for a nine-month, tenure-track position in physical oceanography. Candidates must have earned a Ph.D. in oceanography or a closely related field. Postdoctoral experience is preferred. The successful applicant will teach graduate and undergraduate courses, advise M.S. and Ph.D. students, and develop an independent and successful research program. Our search is open to all specialties within physical oceanography, including climate, observations, and remote sensing. The position is available from August 1998. Salary will be commensurate with experience and start-up funds will be available. Applications will be accepted until September 5, 1997. Applicants should send a current curriculum vitae, a statement of research interests, copies of up to three representative publications, and the names of three references to: **Dr. William K. Dewar, Chair, Search Committee, Department of Oceanography, Florida State University, Tallahassee, FL 32306-3048. E-mail: bill@ocean.ocean.fsu.edu.** Formal applications must be made by mail. The Florida State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available in the characterization of integration site selection of retroviruses and retroviruslike elements. Ty3 is a retroviruslike element which integrates specifically upstream of genes transcribed by polymerase III (*Science*, 267:1488). This system is being studied to facilitate the design of position-specific retrovirus gene therapy vectors. Applicants must be U.S. citizens recently awarded the Ph.D. degree. Extensive experience with yeast molecular genetics, biochemistry and/or virology required. Application and three references should be sent to: **Dr. Suzanne Sandmeyer, Chair, Department of Biological Chemistry, Medical Sciences I, D240, College of Medicine, University of California, Irvine, CA 92697-1700.** Inquiries may be addressed by e-mail to: **sbsandme@uci.edu.** University of California, Irvine is an Equal Opportunity Employer.

POSITIONS OPEN



The United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Beltsville Human Nutrition Research Center (BHNRC), Food Surveys Research Group, is accepting applications for a permanent, full-time **NUTRITIONIST** or related discipline. The objective of this position will be to provide expertise in planning, designing, conducting, and monitoring nationwide food surveys. Candidates must have in-depth knowledge of phases of large-scale dietary assessment surveys and demonstrated experience in planning and implementing broad systems applications for dietary survey procedures. Applicants must be U.S. citizens. Salary range is \$54,629 to \$71,017. For a copy of Announcement Number ARS-D7B-146 and an application package, please call: **USDA, ARS, Human Resources Division, Telephone: 301-344-4638.** Specific questions regarding the position may be directed to: **Alanna Moshfegh, Telephone: 301-734-8457.** The opening date for this announcement is June 30, 1997 and the closing date is July 28, 1997. USDA, ARS is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGY/IMMUNOLOGY SCIENTIST POSITION

Corixa Corporation is a biotechnology company dedicated to the development of T-cell vaccines and therapies for cancer and infectious diseases. Corixa is seeking a molecular biologist or molecular immunologist with a minimum of five to eight years postdoctoral experience to coordinate and conduct research activities in the field of tumor antigen discovery. Successful applicant will have M.D. and/or Ph.D. and be familiar with molecular biology and cancer genomics. Competitive salary and benefits. Please send curriculum vitae, statement of research interests and experience, and names of three references by July 31, 1997 to: **Corixa Corporation, Attn: HR200, 1124 Columbia, Suite 464, Seattle, WA 98104, FAX: 206-667-5715.** An Equal Opportunity Employer.

POSTDOCTORAL POSITION

Several postdoctoral positions are available to study fundamental functional and molecular properties of heart cells. The research focus is to understand the role of cellular receptors and intracellular signal transduction mechanisms on contractility and growth in normal and aging heart models. The project uses an integrated strategy involving biochemistry, molecular biology, gene transfection, microfluorescent imaging of Ca^{2+} , and confocal microscopy. Successful candidates must have a Ph.D. with a strong background of publishing in molecular sciences or physiology and a commitment to training in molecular approaches. Send curriculum vitae and names of three references to: **Dr. Terry B. Rogers, Department of Biochemistry, University of Maryland School of Medicine, 108 North Greene Street, Baltimore, MD 21201. FAX: 410-706-6676.**

POSTDOCTORAL POSITION

City of Hope National Medical Center and Beckman Research Institute is seeking to fill an open postdoctoral position in our Department of Hematology for a maximum of three years in its peptide-based vaccine program for cytomegalovirus infection after BMT. Must have a background in murine or human cellular immunity, especially viral immunity. Additional background in peptide chemistry or molecular biology desirable. The laboratory is part of a cellular immunology program composed of three principal investigators who are interested in both viral and tumor immune mechanisms. Send curriculum vitae and references to: **HEM/BMT/DD, 1500 East Duarte Road, Duarte, CA 91010. Website: www.cityofhope.org.**

RESEARCH ASSOCIATE. Seeking postdoctoral to work on NIMH-funded quantitative neural network theory of hippocampal function using network simulations. Candidates will be judged on their relevant research experience and communication skills. A variety of research backgrounds are appropriate (e.g., cognitive science, biophysics, or computational neuroscience). Send curriculum vitae and three references to: **W. B. Levy, Department of Neurosurgery, University of Virginia, HSC Box 420, Charlottesville, VA 22908; 804-824-5014. E-mail: wbl@virginia.edu.** Affirmative Action/Equal Opportunity Employer.

Diagnostic Assay Development Scientists, Join A Select Team!

Vysis, Inc. is a leader in the development of nucleic acid probes, hybridization reagents and advanced computer imaging systems for the study of genetic diseases—with a rapidly expanding product catalog and sales base. We are seeking self motivated individuals with good oral and written communication skills to join a team of scientists and engineers working toward the development of various diagnostic assays for the detection and molecular characterization of genetic and infectious disease. We currently have openings for Scientists in our Advanced Technology as well as Assay Development groups:

Advanced Technology: Two research positions in the area of multiplex assays, microscale methods and assay automation. Both positions require extensive laboratory experience in nucleic acid and/or immuno-diagnostic techniques, including DNA probe technology, hybridizations, PCR and fluorescence. Familiarity with microscopy and CCD based imaging is a plus.

• A Ph.D. degree in one of the biomedical sciences with a solid background in human genetics, oncology, medical microbiology and immunology. Postdoctoral essential with additional industrial experience strongly preferred. Specific expertise must include sample preparation, amplification, non-isotopic labeling, and development of hybridization and immuno-capture protocols.

• A Ph.D. degree in biophysics, analytical chemistry or one of the biomedical sciences. The ideal candidate will have postdoctoral or industrial experience with emphasis on electrochemistry and MEMS development, and a strong background in capillary electrophoresis, isoelectric focusing, instrument development and device engineering.

Assay Development Group: Development scientist with a Ph.D. in biochemistry or biological science, with 4+ years of postdoctoral experience in molecular biology or biochemistry is required. You should also possess broad-based technical skills in the areas of molecular biology, immunology and gene expression. Experience in the study of human diseases and/or mammalian disease models is preferred, along with familiarity with factorial design and statistical analyses of data. Expertise in a field as demonstrated by a strong publication history is a plus.

Respond by submitting a cover letter, curriculum vitae and salary history to the following address:



Vysis, Inc.
Human Resources Director
3100 Woodcreek Drive • Downers Grove, Illinois 60515
or fax to: (630) 271-7008
Visit us on the Internet @ www.vysis.com
Equal Opportunity Employer M/F/D/V



TENURE-TRACK POSITION PATHOGENETICS

The Laboratory of Pathology is recruiting for a tenure-track position within the Division of Clinical Sciences, National Cancer Institute, National Institutes of Health, Bethesda, Maryland. The successful candidate must hold an M.D. or an M.D., Ph.D. degree, be fully trained in anatomic pathology, and have experience relevant to the genetic analysis of human cancer progression. We are seeking an imaginative and ambitious pathologist, with established experience in gene mapping, gene discovery, and exploratory molecular technologies, who is capable of establishing a vigorous, internationally recognized independent research program. The position will provide an outstanding pathologist investigator with an opportunity to establish himself or herself as an independent investigator in the field of cancer genetics. Successful candidates will be provided laboratory and office space, technical support, an independent budget, and salary commensurate with experience. Applications should include curriculum vitae, a bibliography, a detailed description of research plans, and a list of references. The completed application should be sent by the close of business July 14, 1997, to: **Dr. Thomas Walsh, Chairperson, Search Committee, Head, Immunocompromised Host Section, POB, DCS, NCI, Building 10, Room 13N240, 10 Center Drive, MSC 1928, Bethesda, MD 20892-1928. The NIH is an equal opportunity employer.**



Bristol-Myers Squibb Company

Bristol-Myers Squibb has recently created a senior-level postdoctoral fellowship in Analytical Biotechnology to study underlying mechanisms of Growth/Death (apoptosis) Control. These activities will provide the framework for development of novel technologies to measure specific biochemical events in pathways leading to cellular control for a variety of our project molecules.

Postdoctoral Fellowship in Cell Growth Control Cell-Based Bioassays

The selected candidate will possess a Ph.D. in Cell Biochemistry, BioPhysics, Experimental Cancer Biology or related area, with up to 3 years postdoc experience in the bioenergetic control of cellular metabolic pathways. Excellent communication skills, a flexible team-oriented approach to scientific discovery, and a strong record of accomplishment are a must. The candidate will join our highly interactive "state-of-the-art" Bioanalytical Research and Development Group for a period of 1-2 years. The incumbent will be expected to present scientific findings at scientific meetings in peer-reviewed publications.

This position offers a highly competitive salary and an excellent benefits package with relocation assistance. We are located in Syracuse, NY, an area that offers an attractive and affordable lifestyle. For consideration, please send your resume with salary history to: **Bristol-Myers Squibb Company, Human Resources, Job #SY970388, P.O. Box 4755, Syracuse, NY 13221-4755. Equal Opportunity Employer, M/F/D/V.**

POSITIONS OPEN

LAWRENCE LIVERMORE NATIONAL LABORATORY POSTDOCTORAL RESEARCH STAFF MEMBER

Work as part of an interdisciplinary team of physicists, chemists, and biologists at the Center for Accelerator Mass Spectrometry (CAMS) at Lawrence Livermore National Laboratory. The appointment will be for two years with the possibility of a one-year extension.

The main focus of this position will be to use ¹⁴C AMS measurements to study carbon cycling in the biosphere and the response of biological systems to enhanced CO₂ levels. The successful candidate will develop experimental programs to explore these issues and will work closely with LLNL modelers and external collaborators.

Requires a recent Ph.D. in ecology, soil science, biology, biochemistry, or a related field. Experience in the use of stable isotopes and radiocarbon as carbon cycle tracers, FACE experiments and other elevated CO₂ studies, and AMS sample preparation techniques is desired. Familiarity with carbon cycling in soils and biomass also desired.

LLNL offers a challenging work environment and a competitive salary/benefits package. Interested candidates are invited to send a résumé to: Lawrence Livermore National Laboratory, Attn: Mary Anne Holman, R-725, P.O. Box 5510, R-4510, Department AJSC6R7MH, Livermore, CA 94551-5510. LLNL is an Equal Opportunity Employer.

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Position available to study viral and host mechanisms in HIV-1 infection. Projects include the role of chemokine receptors in a CNS infection (*Nature*, 385:645, 1997); mechanisms of neuronal cell death in AIDS (*PNAS*, 94:3954, 1997; *JCI*, 98:1979, 1996); molecular biology of HIV-1 regulatory proteins (*JBC*, 271:10121, 1996). Recent Ph.D. and experience in molecular biology is required. Send curriculum vitae, brief description of research experience, and names of three references to: Dr. Dana Gabuzda, Dana-Farber Cancer Institute, JF 712, 44 Binney Street, Boston, MA 02115. FAX: 617-632-3113. An Equal Opportunity Employer.

POSTDOCTORAL FELLOW SYNTHETIC/BIO-ORGANIC CHEMIST

Interested and experienced in glycoconjugate synthesis and NMR/mass spectrometric analysis. Immediate project: synthesis of anti-adhesive structures based on specific glycoconjugates. Salary depending on experience. Send curriculum vitae and name/address/telephone of three (3) references to:

Dr. Cho-chou Kuo and/or Dr. Sen-itiroh Hakomori
University of Washington
School of Public Health and Community Medicine
Department of Pathobiology, Box 357238
Seattle, WA 98195-7238

POSTDOCTORAL POSITION

Postdoctoral position is available to study the molecular mechanisms of prostate cancer development and genetic diagnosis of prostate cancer. Background in molecular biology is required. Please mail or FAX your curriculum vitae, statement of interests, and the names of three references to: N. Papadopoulos, Ph.D., Department of Pathology, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-305-5498. Columbia University takes Affirmative Action toward Equal Employment Opportunity.

POSTDOCTORAL POSITION available immediately to study the yeast prion, [PSI] (<http://www.uic.edu/depts/bios/lmb.html>). [PSI] is an inherited protein conformational variant, and thus a model for the "mad cow" PrP prion. Experience in protein isolation/biochemistry or yeast genetics is preferred. Apply to: Susan Liebman, Laboratory for Molecular Biology (M/C 567), University of Illinois at Chicago, 900 South Ashland Avenue, Chicago, IL 60607; FAX: 312-413-2691; e-mail: suel@uic.edu.

POSTDOCTORAL POSITION to study glycobiology of mammalian endoplasmic reticulum. See *JBC*, 271:13935, 27031, 30717; 272:14214. Send curriculum vitae and names of three references to: Mark Lehrman, Department of Pharmacology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235. E-mail: lehrman@utsw.swmed.edu.

POSITIONS OPEN



A POSTDOCTORAL POSITION is available immediately to study antigen presentation and the molecular mechanisms regulating intracellular trafficking of membrane proteins in B and T lymphocytes. Present studies include analysis of the molecular interactions between transport vesicle and target membrane SNARE proteins, the role of phosphorylation in regulating MHC protein sorting, and reconstitution of intracellular protein transport to antigen processing compartments in cell-free systems. Applicants must have less than five years of postdoctoral experience. Applicants should submit a curriculum vitae and names of three references directly to: Dr. Paul A. Roche, Experimental Immunology Branch, National Cancer Institute, National Institutes of Health, Building 10, Room 4B17, Bethesda, MD 20892-1360. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION WASHINGTON UNIVERSITY CANCER CENTER

Several postdoctoral positions are available beginning July 1, 1997 to study the molecular biology of tumor suppressor genes, including developing mouse models, analysis of signaling pathways, and identification of interacting proteins. Qualifications include M.D. or Ph.D. in genetics, molecular biology, or related discipline. Please send curriculum vitae and two reference letters to: David H. Gutmann, M.D.-Ph.D., Department of Neurology, Washington University, Box 8111, 660 South Euclid Avenue, St. Louis, MO 63110. FAX: 314-362-9462. E-mail: gutmann@neuro.wustl.edu.

POSTDOCTORAL POSITION

The Holland Laboratory at American Red Cross has a postdoctoral position available to study mechanisms of inducing immune tolerance with application to the elimination of antibodies which develop in hemophilia A patients treated with exogenous factor VIII (*Blood*, 89:3663, 1997). Applicants should have a strong background in immunology and molecular biology. Interested applicants should send their curriculum vitae and names of three references to: Dr. Dorothea Scandella, Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION available immediately to study the role of the molecular chaperone hsp70 in protecting cardiac cells from ischemia using biophysical techniques. Experience in cell culture and 2D gels required. Send curriculum vitae, names of three references and a brief description of research experience to: Dr. Anthony L. Fink, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064. FAX: 408-459-2935. E-mail: enzymb@cats.ucsc.edu.

POSTDOCTORAL POSITION available for work in area of islet transplantation as treatment for diabetes. Emphasis will be on cell biology of porcine islet cells and their performance in immunobarrier devices. Experience with rodents and cell culture techniques is desirable. Send curriculum vitae and names of two references to: Dr. Gordon C. Weir, Research Division, Joslin Diabetes Center, Boston, MA 02215. E-mail: weirg@joslab.harvard.edu. The Joslin Diabetes Center is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS

The Michigan Society of Fellows offers three-year fellowships at the University of Michigan to begin September 1998. The annual stipend will be \$32,500. For information and applications please see: <http://www.umich.edu/~rackband/Final/Faculty/society.htm>, or e-mail: society.of.fellows@umich.edu, or mail a request to: Society of Fellows, 3030 Rackham Building, University of Michigan, Ann Arbor, MI 48109-1070.

YEAST mRNA TRANSPORT

POSTDOCTORAL POSITION, molecular genetic experience, U.S. citizen or permanent resident required. *JCB*, 126:649; *EMBO J.*, 15:6750. E-mail curriculum vitae and references to: A. Tartakoff, Case Western Reserve University, e-mail: amt10@po.cwru.edu; FAX: 216-368-5484.

POSITIONS OPEN

AWU POSTDOCTORAL FELLOWSHIP AT BATTELLE, PACIFIC NORTHWEST NATIONAL LABORATORY Microbiology

Immediate opening—A postdoctoral research fellowship at Pacific Northwest National Laboratory is available for a U.S. citizen with technical expertise in microbiology, as demonstrated by departmental degree and/or publications. Demonstrated experience and familiarity with microbial detection/identification and phylogenetics emphasizing nucleic acid-based approaches including but not strictly limited to PCR-based methodologies is desired. Experience in characterizing microbes from aerosol samples greatly desired. Familiarity with host-microbial pathogen systems [animal/human/plant] desirable. Additional experience in the application of flow cytometric analyses for microbial identification or studies of gene expression, antibiotic susceptibility, etc. strongly desired. The candidate will interface with several different laboratory projects involving nucleic acid and other methods of microbial identification. The candidate should be able to obtain a DOE "L" security clearance or DOD equivalent.

Stipend—\$35,000.00 plus medical benefits. Funds are also provided for relocation costs and travel to scientific meetings. Position is for one year with the possibility of extension to a maximum of three years.

Program administered by Associated Western Universities, Inc.

Send résumés by August 15, 1997 to:

Dr. Mark Kingsley
Postdoctoral Fellowship—#9704
Pacific Northwest National Laboratory
P.O. Box 999, MSIN K4-12
Richland, WA 99352
Telephone: 509-375-3965
FAX: 509-375-6666
E-mail: mt_kingsley@pnl.gov

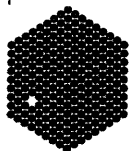
POSTDOCTORAL POSITION in developmental neurobiology, nerve regeneration, gene expression, and signal transduction. Major efforts are to determine the role of neuropeptides in neural tube patterning, including effects on cell proliferation, survival, and differentiation, and signal transduction pathways involved. Experimental approaches include neural tube explants, DNA transfer, transgenics/knockouts. Preference to candidates with experience and qualifications to apply for subsequent postdoctoral funding. Please send curriculum vitae and names of three references to: Dr. J. Waschek, 68-225 NPI, UCLA, 760 Westwood Plaza, Los Angeles, CA 90024-1759; FAX: 310-206-5061.

POSTDOCTORAL POSITION immediately available to study homeobox genes in early development using transgenic animals to study gene regulation and for targeted misexpression of homeobox genes. NIH training grant position for Ph.D./M.D. experienced in molecular biology. U.S. citizens/permanent resident send curriculum vitae and list of references to: C. W. Bogue, MD, Department of Pediatrics, Yale University, Box 208064, New Haven, CT 06520. Affirmative Action/Equal Opportunity Employer, minority/female applicants encouraged.

POSTDOCTORAL POSITION for NIH-funded study of molecular mechanisms of brain injury and DNA damage and repair, including gene expression related to apoptosis. Ph.D. in neuroscience or molecular biology and excellent written/spoken English language skills required. Send curriculum vitae and three letters of reference to: Chung Y. Hsu, M.D., Ph.D., Department of Neurology, Box 8111, Washington University School of Medicine, 660 S. Euclid Avenue, St. Louis, MO 63110. E-mail: treatk@neuro.wustl.edu.

POSTDOCTORAL POSITION studying nuclear protein transport. Includes *E. coli* expression of NLS-protein variants and their intracellular receptors, analysis of transportant/receptor interactions, and *in vitro* and *in vivo* transport assays. Send résumé and names of three references to: Dr. Phillip L. Paine, Laboratory of Intracellular Biophysics, St. Albert's Hall, St. John's University, 8000 Utopia Parkway, Jamaica, NY 11439. E-mail: painep1@lx.netcom.com.

POSTDOCTORAL FELLOW to work in laboratory at Boston University School of Medicine investigating regulatory peptide, receptors, development and growth of GI tract. Experience in molecular biology and physiology necessary. Send or FAX curriculum vitae and the names of three references to: Dr. Chi Tseng, GI Section, Boston Medical Center, 88 East Newton Street, Boston, MA 02118. FAX: 617-638-7785. An Affirmative Action/Equal Opportunity Employer.



EMBL

Grenoble Outstation

The European Molecular Biology Laboratory (EMBL), an international research organisation with its Headquarters Laboratory in Heidelberg (Germany), Outstations situated in Grenoble (France), Hamburg (Germany) and Hinxton (UK), and a Research Programme at Monterotondo (Italy) has the following vacancies:

GROUP LEADER POSITIONS AT THE GRENOBLE OUTSTATION OF EMBL

The EMBL Outstation in Grenoble is a laboratory of structural molecular biology sharing a site with the European Synchrotron Radiation Facility (ESRF), a high brilliance synchrotron X-ray source and the Institut Laue-Langevin (ILL) a leading international centre for neutron scattering. The EMBL Outstation is closely collaborating with both institutes to provide support for biologists wishing to use these facilities. At the same time groups at the Outstation actively pursue their own research interests in structural biology. The Outstation offers facilities for molecular biology, protein purification, electron microscopy and X-ray crystallography.

Five groups are currently working at the Outstation. The instrumentation group is concerned with X-ray and neutron beamline and detector development (Wilkinson group). Two crystallographic groups are focussing on structure-function relationships of RNA-binding proteins and viral proteins (Cusack group) or proteins involved in transcriptional regulation (Müller group). The virus structure group works on the mechanism of transcription and replication of enveloped viruses (Ruigrok group). The protein biosynthesis group is working on aminoacyl-tRNA synthetases, tRNAs and elongation factors but will leave in 1998 (Leberman group). In addition the EMBL/ESRF Joint Structural Biology Group (JSBG) is responsible for running the structural biology beamlines at the ESRF.

The Outstation has vacancies for two outstanding scientists as independent group leaders:

(1) Group leader in structural molecular biology (ref. 97/43)

The candidate should work in an exciting area of biology using molecular biology, biochemistry and possibly cell biology techniques but should have a strong interest in structural biology. He/She will strengthen the biochemical and molecular biology expertise of the Outstation, rather than the crystallographic side, and develop projects which will challenge the structural biology facilities at the site. In addition the successful candidate will be expected to play an active role in the organisation of the biochemical laboratories, including assistance to visitors. Possible areas of research, by no means exhaustive, are in the fields of transcriptional or translational regulation, RNA processing, nucleo-cytoplasmic transport, molecular virology or protein secretion. Ideally the research interests of the candidate would complement ongoing research at the Outstation and collaborations with the existing groups, or with the central Heidelberg laboratory, are strongly encouraged.

(2) Group leader in computational crystallography (ref. 97/44)

The ESRF-EMBL Joint Structural Biology Group (JSBG) beamlines at the ESRF are a European focus for challenging experiments in macromolecular crystallography on micro- or very large unit cell crystals using, for instance, MAD techniques or time-resolved crystallography. We wish to complement these activities with the establishment of a computational crystallography group whose interests could range from implementing methods for processing massive amounts of data to the development of new methods of phase determination using highly accurate MAD data from large proteins or refinement by maximum likelihood methods. Close interaction with JSBG crystallographers and beamline scientists would be expected.

An initial contract of 3-5 years, renewable up to nine years will be offered.

The positions are available from Spring 1998

Closing date: September 30th, 1997

For further information please contact Dr. Stephen Cusack, Chair of the Search Committees

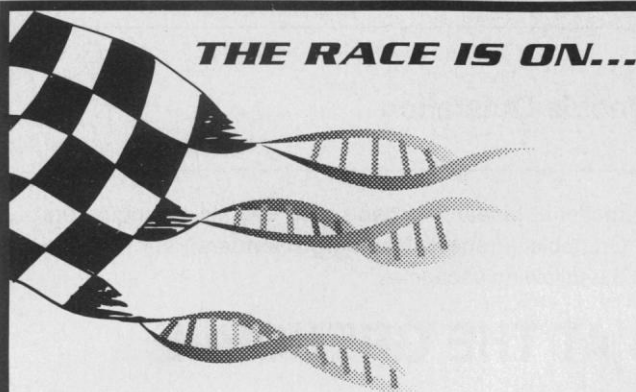
Tel.: +33 4 76 20 7238; Fax: +33 4 76 20 7199; email: cusack@embl-grenoble.fr

EMBL is an inclusive, equal opportunity organisation.

Please send complete CV, research proposal and addresses of referees, quoting appropriate ref. no., to:

The Head of Human Resources, EMBL, Postfach 10.2209, D-69012 Heidelberg

Fax: +49 6221 387555; Tel.: +49 6221 387 208; email: jobs@EMBL-Heidelberg.de



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Collagen Corporation is a progressive and growing biomedical company with a successful record of developing, manufacturing and marketing high quality, biocompatible products for the treatment of defective, diseased, traumatized or aging human tissues. Currently, we are seeking a Research Scientist to design and execute a scientific-based program as a key contributor to our Soft Tissue Development Group.

With the ultimate goal of moving products from R&D to the market faster and more efficiently, you will work in close collaboration with scientists and engineers and use your expertise to develop data that will support the safety and effectiveness of new products. This will require significant experience with medical device, biologic or pharmaceutical product research and development, preferably related to matrix proteins or other novel biomaterials-based products. A Ph.D. in biology, biomaterials, cell biology or closely related life science discipline and 5-10 years of post-doctoral experience in medical device product development are required. The successful candidate must be able to design and conduct in vivo experiments using a variety of cell culture, toxicology, and immunology assay techniques. Previous experience in developing data to secure FDA approval a plus.

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UroGenesys, Inc., located in Santa Monica, California, is a new discovery-based biotechnology company dedicated to the development of novel diagnostics and therapies for prostate cancer. We are currently seeking two Ph.D.-level scientists for our Gene Discovery and Gene Therapy research programs.

The ideal candidate for the Gene Discovery position will have expertise in molecular biology and gene discovery exemplified by postdoctoral experience and a strong publication record in the cloning and characterization of novel genes implicated in human disease processes. Experience in gene discovery methodologies, including Representational Difference Analysis (RDA), Differential Display, and cDNA library construction and screening is required.

The ideal candidate for the Gene Therapy position will have relevant postdoctoral experience and a strong publication record in the development and use of novel vectors for the delivery of therapeutic genes. Experience in adenoviral gene therapy using animal models is preferred.

Both positions require strong communication, organizational, and leadership skills and the ability to work in a team-oriented environment. Previous biotech industry experience is preferred, but not required.

UroGenesys, Inc. offers competitive salaries and a comprehensive benefit plan. If you would like the opportunity to work in and grow with an exciting new discovery-based biotechnology company, please send your Curriculum Vitae with indication of the position you are applying for to:

**Human Resources
UroGenesys, Inc.
1701 Colorado Avenue
Santa Monica, CA 90404.**

Equal Opportunity Employer.

Center for Genomics Research at Karolinska Institute Seeks to Identify Unit Heads and Group Leaders

In May of 1997 the most extensive university-industry collaboration in Sweden was announced. At that time, Pharmacia & Upjohn agreed to support a new Center for Genomics Research at Karolinska Institute in Stockholm. This new Center will also have Departmental status at Karolinska Institute and has secured existing laboratory space from September 1997. In addition to the Center itself, collaborations with leading preclinical as well as clinical research groups throughout the Karolinska Institute are currently being established.

Center scientists will receive appropriate academic appointments. Certain positions will be filled through employment at Pharmacia & Upjohn's Stockholm research campus, nearby the Karolinska Institute, with leave of absence to conduct work at the Center.

The present announcement seeks to further identify individuals or existing research groups interested in joining this unique effort. Recruitment is both international and local. Applications from junior scientists are also encouraged.

Units and groups possibly to be formed at the new Center are listed below:

Bioinformatics Unit

(close association to Pharmacia & Upjohn)

- Database Management Group
- Exploratory Group

Genomics Technologies Unit

- Sequencing Technologies Group
- Display Technologies Group
- DNA Chip Technologies Group
- Mapping Group

Functional Genomics Unit

- Model System Group
- Metabolic Disease Group
- CNS Disease Group
- Infectious Disease Group
- Oncology Group
- Inflammation Group



**Pharmacia
& Upjohn**

Letters of interest and curriculum vitae may be directed to:
Dr. Claes Wahlestedt
Center for Genomics Research
Karolinska Institute
S-171 77 Stockholm, Sweden
E-mail: Claes.Wahlestedt@admin.ki.se
Fax: +46 8 32 39 50



3rd Annual Symposium on the Neurovirology and Neuroimmunology of Schizophrenia and Bipolar Disorder

Sponsored by

The Stanley Foundation and the Johns Hopkins University School of Medicine

October 23 -25, 1997

Pooks Hill Marriott

Bethesda, Maryland

Plenary Speakers:

John Kurtzke, M.D., Professor of Neurology, Georgetown University, Chief of New Epidemiology Section of Neurology Service at VA Medical Center, Washington, DC - *"What Epidemiology Can Tell About Multiple Sclerosis."*

Peter Jones, M.Sc., Ph.D., Professor of Psychiatry and Community Mental Health, University of Nottingham, United Kingdom - *"Psychiatric Sequelae of CNS Infections in Fetal and Childhood Life - Results from Longitudinal Studies in North Finland and the United Kingdom."*

The goal of the meeting is to bring together researchers from diverse fields who are interested in the role that viruses may play in the etiology of schizophrenia and bipolar disorders. Subjects to be discussed include:

- viral models of CNS functional pathology
- the effects of viruses on dopamine, serotonin, and other neurotransmitters
- viruses as triggers for immune dysfunction leading to psychiatric morbidity
- molecular virology
- antiviral properties of antipsychotic drugs and other psychopharmacological aspects
- epidemiological aspects of schizophrenia and bipolar disorder which are consistent with a viral etiology
- The Stanley Neuropathology Consortium and the availability of brains for research

There is no registration fee for this meeting. To receive registration materials please contact: **Ms. Ann Cusic** at 410-955-3271 (phone); 410-614-1491 (fax); or E-mail acusic@welchlink.welch.jhu.edu

29 August 1997

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Leicester University

MEDICINE & THERAPEUTICS DIVISION OF VASCULAR MEDICINE

Postdoctoral Research Associate

£15,159 to £22,785 pa (Ref: R7062/SC)

A three year position available from July 1997 to investigate the regulation of microvascular permeability by VEGF. A multi disciplinary approach will be used, including adenovirus mediated gene transfer of receptors, molecular characterisation of vessels, physiological measurement of capillary permeability and pharmacological manipulation of the response to VEGF. Applicants should have, or expect to have a relevant PhD and experience in adenovirus mediated gene transfer and molecular biology. Familiarity with cardiovascular physiology, and microvascular permeability would be useful. Further particulars are at www.le.ac.uk/medther/dob1/dob1.html

Closing date: 17 July 1997

Further particulars and application forms are available from the Personnel & Planning Office (Research Appointments), University of Leicester, University Road, Leicester LE1 7RH, UK. Tel: +44 116 223 1341. Fax: +44 116 252 5140.

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SCHOOL OF BIOLOGICAL SCIENCES

ZENECA

Three Postdoctoral Scientist Positions

for Collaboration between the School of Biological Sciences, Manchester and Zeneca Pharmaceuticals

Three postdoctoral positions are available to join a team of scientists at the School of Biological Sciences, University of Manchester, and Zeneca Pharmaceuticals, Alderley Edge, Cheshire, working on basic aspects of energy balance regulation and dysfunction. This collaborative project is seeking to identify the mechanisms and molecules involved in energy balance regulation using molecular, cellular and physiological approaches.

The positions will be available for one year in the first instance, renewable for up to five years. Successful applicants will have skills in molecular biology, neurobiology and/or physiological techniques, will be expected to work at the University and at Zeneca (15 miles apart) and must be keen to work in a multi-disciplinary team.

Salary on the RA1A scale: £15,159 - £22,785 per annum.

Informal enquiries may be made to: Dr B Holloway, Zeneca Pharmaceuticals, Mereside, Alderley Edge, Macclesfield, Cheshire SK10 4TG. Tel: 01625 582828, Fax: 01625 516033 or Professor Nancy Rothwell, School of Biological Sciences, 1.124 Stopford Building, University of Manchester M13 9PT. Tel: 0161 275 5357, Fax: 0161 275 5948, Email: Nancy.Rothwell@man.ac.uk

Further particulars and application forms are available from the Office of the Director of Personnel, The University of Manchester, Oxford Road, Manchester M13 9PL. Tel: 0161 275 2028, Fax: 0161 275 2221, Minicom: 0161 275 7889, Email: Personnel@man.ac.uk

Formal applications should include a covering letter, full CV and names of three referees to be received by 18th July 1997. Please quote ref: 347/97.

As an Equal Opportunities Employer, The University of Manchester welcomes applications from suitably qualified people from all sections of the community regardless of race, religion, gender or disability.



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

SWISS FEDERAL INSTITUTE OF TECHNOLOGY LAUSANNE (EPFL)

Applications are invited for the following full-time position
Professor of Polymers
in the Department of Materials Sciences

The candidate should have specific academic training in polymer science as well as several years of professional experience. He/she will build and lead a world-class research program in the field of science and technology of polymers. A capacity to conceive and lead important projects and to cooperate with other laboratories is required.

The candidate should be equally interested in fundamental phenomena and problems in technology and their industrial applications. He/she should possess good leadership skills, a spirit for teamwork, and ability to manage projects in connection with industries. A marked interest and talent for teaching is necessary; in particular, the new professor should be capable to lead students and enjoy being a mentor for young researchers and Ph.D. students. Applications from women are particularly welcome. **Deadline for applications: November 10, 1997.** Start date: as mutually convenient.

The application form can be obtained by writing to: **Présidence de l'Ecole polytechnique fédérale de Lausanne, CE-Ecublens, 1015 Lausanne, Switzerland.**

POSITIONS OPEN

ANTICIPATED POSTDOCTORAL RESEARCHER BIOLOGICAL SCIENCES

A postdoctoral researcher position is available for the study of protein-protein interactions in an energy transducing membrane protein complex. Methods to be used include site-specific labeling, mass spectroscopic analysis, and molecular techniques (see Frankel, L. K. and Bricker, T. M., *Biochemistry*, 34:7492, 1995; Putnam-Evans et al., *Biochemistry*, 35:4046, 1996). Applicants must possess a Ph.D. in biochemistry or related area.

Anticipated hire date is July 28, 1997, pending final approval. Application deadline is July 11, 1997, or until candidate is selected. Submit letter of application, curriculum vitae, and at least two letters of reference to: Dr. Terry Bricker, Department of Biological Sciences, Louisiana State University, Baton Rouge, LA 70803, or apply by e-mail: btrbric@lsuvm.sncc.lsu.edu.

LSU is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF PENNSYLVANIA

POSTDOCTORAL POSITION with possibility of Research Assistant Professor of Psychiatry, to serve as Project Director of longitudinal study of growth and development of infants at high risk for obesity now in its fourth year. The position requires good communication skills for cohort maintenance and qualitative skills for data analysis. Please send curriculum vitae, a description of your research experience, and the names and telephone numbers of three references to: Dr. Albert J. Stunkard, Interim Chairman, Department of Psychiatry, 3600 Market Street, Room 734, Philadelphia, PA 19104. FAX: 215-898-2878, e-mail: stunkard@mail.med.upenn.edu. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS in ribozyme research studying structure, function, and applications of catalytic RNA. Methods include *in vitro* selection, modification, biophysical studies, kinetic analyses, and molecular modeling. See *J. Biol. Chem.*, 272:13629-13639, 1997; *RNA*, 3:392-404, 1997; *Nud. Acids & Mol. Biol.*, 10:129-143, 1996. NIH funding available, but candidates with potential to compete for postdoctoral fellowships will be strongly favored. Exciting research atmosphere in dynamic and growing young department. Superb living environment. Contact: Dr. John M. Burke, University of Vermont, Markey Center for Molecular Genetics, 306 Stafford Hall, Burlington, VT 05405 USA. Telephone: 802-656-8503; FAX: 802-656-8749; e-mail: jburke@zoo.uvm.edu.

POSTDOCTORAL POSITIONS

Available immediately: (1) to study the mechanism of action and signal transduction of KGF on pulmonary epithelial cells or (2) host defense properties of surfactant proteins A and D. Experience in molecular or cell biology, microbiology, or biochemistry expected. Please send curriculum vitae and names of three references with telephone numbers to: Dr. Robert J. Mason or Dr. Dennis R. Voelker, Department of Medicine, National Jewish Medical and Research Center, 1400 Jackson Street, Denver, CO 80206; e-mail: masonb@njc.org or voelkerd@njc.org; telephone: 303-398-1302; FAX: 303-398-1806.

POSTDOCTORAL POSITIONS available immediately to study structure-function of glutamate receptors. Experience either in whole cell and outside-out patch recording, particularly with *Xenopus* oocytes, or in molecular biology and/or biochemistry of ion channels. Please send curriculum vitae, a brief statement of research interests, and names of three referees to: Dr. Kathy Partin, Department of Anatomy and Neurobiology, Colorado State University, Fort Collins, CO 80523-1670. FAX: 970-491-7907. E-mail: kpartin@lamar.colostate.edu. Colorado State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study human cytomegalovirus replication in polarized epithelial cells. Project focuses on signals for polarized transport of viral envelope glycoproteins and regulation of virion maturation and egress. Previous research experience in molecular virology and cellular biology desirable. Interested candidates should submit curriculum vitae and names of three references to: Dr. Lenore Pereira, University of California San Francisco, HSW-604, San Francisco, CA 94143-0512. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS available in photobiology and biomolecular devices at Arizona State University. This NSF-funded multidisciplinary research program involves the study of light-driven biochemical mechanisms and their application to the engineering of new electronic, optical, chemical, or biological devices. Applicants must have a Ph.D. in one of the following: botany or plant science, biochemistry, bioengineering, chemistry, or electrical engineering. Evidence of substantial publication record in one or more of the above disciplines and experience in one or more of the following: molecular biology, optical spectroscopy, nanostructures, structural biology, and molecular electronics desired. More information about the faculty involved and the research projects is at <http://photoscience.la.asu.edu/rtg>. Applicants must be U.S. citizens or permanent residents. Send curriculum vitae, description of skills and areas of expertise, and three letters of recommendation to: Mr. Larry Orr, Administrative Assistant, Department of Chemistry and Biochemistry, Arizona State University, Tempe, AZ 85287-1604. First review July 13, 1997 and on the Friday of each week until filled.

Arizona State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to study a novel antiviral component identified in human serum (*Viral Immun.*, 5:293-303, 1992). Outstanding scientific environment, senior investigators, latest technology, highly competitive salary, and potential. Candidates should have experience in glycoprotein purification and characterization and an interest in molecular virology. Send curriculum vitae and names of three references to: Dr. Samuel Baron, University of Texas Medical Branch, Route 1019, Galveston, TX 77555-1019. Telephone: 409-772-2325, FAX: 409-772-5065, e-mail: samuel.baron@utmb.edu. UTMB hires only persons authorized to work in the U.S. and is an Affirmative Action/Equal Opportunity Employer including Minorities/Females/Disabled/Veterans.

POSTDOCTORAL RESEARCH ASSOCIATE

To study molecular biology, structure, and function of cytosolic lipid binding proteins. Ph.D. in biochemistry, chemistry, biology, physiology, or related field desirable. Send curriculum vitae and three letters of reference to: Dr. F. Schroeder, Department of Physiology and Pharmacology, College of Veterinary Medicine, Texas A&M University, College Station, TX 77843-4466. Texas A&M University is an Affirmative Action/Equal Opportunity Employer committed to excellence through diversity. Texas A&M University particularly invites applications from minorities, women, veterans, and persons with disabilities.

CLINICAL CHEMISTRY POSTDOCTORAL FELLOWSHIPS at Mayo Clinic. Seeking applicants for two-year ComACC-approved fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1997, will be considered for appointment beginning in July, 1998. Contact: Mary F. Burritt, Ph.D., Division of Clinical Biochemistry & Immunology, Mayo Clinic, Rochester, MN 55905, for more information. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION, HEMATOLOGY UNIVERSITY OF PENNSYLVANIA

A position is available to study post-transcriptional regulation of gene expression utilizing *in vitro*, cell culture, and transgenic mouse model systems. Applicants must have a strong background in molecular biology. Additional experience in protein purification is desirable. Send curriculum vitae, a brief description of research interests and career goals, and the names of three references to: J. Eric Russell, M.D., Abramson Building #316F, Children's Hospital of Philadelphia, 34th and Civic Center Boulevard, Philadelphia, PA 19104.

POSTDOCTORAL POSITION in immunology available immediately to study the cellular and molecular mechanisms of autoimmune disease (e.g., myasthenia gravis) pathogenesis. Individuals with expertise in cellular and/or molecular immunology should submit their curriculum vitae plus three references to: Premkumar Christodoss, M.D., Department of Microbiology and Immunology, University of Texas Medical Branch, Galveston, TX 77555-1019. FAX: 409-772-5065. UTMB is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.

POSITIONS OPEN

POSTDOCTORAL POSITIONS BIOCHEMISTRY/X-RAY CRYSTALLOGRAPHY

Postdoctoral positions are available to study protein-nucleic acid interactions among endonucleases, transcription factors, and RNA binding proteins. Highly motivated candidates with a strong background in either biochemistry or protein crystallography are encouraged to apply.

The laboratory is equipped with state-of-the-art facilities including several imaging plate area detectors and excellent protein expression and analysis capabilities. Please send résumé, including the names of three references, to: Dr. Anel Aggarwal, Department of Physiology and Biophysics, Box 1677, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029.

POSTDOCTORAL POSITION is available July 1, 1997 to study ceramide signaling in *Saccharomyces cerevisiae* (Nickels and Broach, *Genes & Dev.*, 10:382-394, 1996). Several projects are underway including: (1) cloning genes involved in sphingolipid synthesis, (2) genetic and biochemical analysis of ceramide signaling components. Experience in either yeast molecular biology or biochemistry is preferred but training will be provided to the right individual. Please send curriculum vitae and three references to: Dr. Joseph Nickels, Assistant Professor, Department of Biochemistry, MCP-Hahnemann School of Medicine, Allegheny University of the Health Sciences, 2900 Queen Lane, Philadelphia, PA 19129. FAX: 215-843-8849. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available for one year to study the mechanism of attachment of the tomato spotted wilt tospovirus in the midgut of the western flower thrips. Incumbent must have Ph.D. and relevant experience in virus receptor characterization and molecular biology. A curriculum vitae, a summary of incumbent's research approach to the project not to exceed two pages, and three letters of reference should be provided by September 1 to: John L. Sherwood, Department of Plant Pathology, University of Georgia, Athens, GA 30602-7274. UGA is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available for three years to study molecular biology of cellular uptake of folates and antifolate anticancer drugs such as methotrexate. Experience with molecular techniques and cell cultures is essential. Send curriculum vitae and references to: Jeffrey A. Moscow, M.D., Chief, Pediatric Hematology Oncology, Department of Pediatrics, J457 Kentucky Clinic, 740 South Limestone Street, Lexington, KY 40536-0284. FAX: 606-323-3499; e-mail: moscowj@pbmac.nci.nih.gov.

COURSES & TRAINING

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Hands-on laboratory and theory are used to teach the essentials of protein purification. Each participant will use theoretical knowledge gained in lectures to create useful purification plans that will then be used to isolate and characterize active biomolecules from complex biological sources. Biotechnology Center, Utah State University, Logan, UT. Telephone: 801-797-3504. FAX: 801-797-276.

ANNOUNCEMENT

THERAPEUTIC ANTIBODY TECHNOLOGY 97; Sept. 21-24, 1997; Holiday Inn-Union Square, San Francisco; Organizers: J. Larick, D. Burton. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; Fax: 415-694-7717; Email: paimm@netgate.net; See *SCIENCE* May 2, 1997 for speakers. See also Antibody Research webpage: <http://antibodyresearch.com>.

DIRECTOR PROGRAM OFFICE

The National Academy of Engineering is seeking candidates for the position of Director, Program Office. Candidates should have a Ph.D. or equivalent, preferably in science and technology policy, environmental sciences or engineering, or the economics of technological change and at least six to seven years of experience in policy or business analysis of engineering, competitiveness, or environmental issues. The position requires demonstrated ability to lead and manage an office with an annual budget of approximately \$2 million, including office planning, programming, budgeting, fund-raising, staff management, project leadership, and working with committees and staff to formulate, start, run, and complete multiple projects. The position also requires effective oral and written communication skills. The National Academy of Engineering offers an excellent benefits package including life and health insurance, long-term disability and retirement plan. Send resume to **NAE (CL/PD), 2101 Constitution Avenue, N.W., NAS 218, Washington, DC 20418. EOE**

ANNOUNCEMENT

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Applicants with all levels of experience will be considered, from Assistant Professor to Professor. Preference will be given to people who study natural behavior of animals, but candidates are welcomed with backgrounds in a broad range of neurobiology, extending from molecular neurobiology to systems and computational neurobiology.

Ph.D. and postdoctoral experience are required. Salaries will be commensurate with stature in the field and based on the UC salary scale. Application deadline is August 22, 1997. Please submit a CV with your address, phone and fax numbers, email address, bibliography, statement of professional goals, research interests, and the names, addresses, phone and fax numbers, and email addresses of three references to Ms. Mary Sue Webb, Department of Biology, 0346, The Neurobiology Search, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA, 92093-0346. Please identify the journal advertisement to which you are responding.

Faculty Position in Ecology, Behavior, or Evolution

A faculty position (with preference for the tenure-track Assistant or tenured Associate level). We seek an innovative researcher working in the general areas of ecology, behavior, or evolution. Persons working at any level of organization from molecular to ecosystems and macroevolution are encouraged to apply. Salary will be commensurate with level of appointment and based on the UC salary scale. The successful candidate is expected to develop or continue a vigorous research program and participate in the undergraduate and graduate teaching curriculum. A Ph.D. degree and several years of productive postdoctoral research required. Applicants should send a CV with their address, phone, and fax numbers, email address, bibliography, statement of research interests, and the names, addresses, fax and phone numbers and email addresses of three references by August 22, 1997, to Carrie Garnett, EBE Search Committee, University of California, San Diego, Department of Biology 0346, 9500 Gilman Drive, La Jolla, CA 92093-0346. Please identify the position you wish to be considered for and the journal advertisement to which you are responding.

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In general, proposed research projects should be of one to two years duration (renewals possible) with direct costs requests ranging from \$100,000 to \$150,000 per project year. Smaller pilot and larger research projects may be considered as well as other initiatives consistent with the MGRI mission.

For complete program information and proposal guidelines contact:

Dr. Finley Austin
Administrative Director
Merck Genome Research Institute
Sumneytown Pike, P.O. Box 4
WP42-300
West Point, PA 19486
or
email at mgri@merck.com

POSITIONS OPEN

POSTDOCTORAL POSITION available to study the physiology and pharmacology of baroreceptor and chemoreceptor afferent integration in mammalian CNS using electrophysiological, anatomical, and molecular approaches. Send résumés and names of references to: **Dr. Steve Mifflin, Department of Pharmacology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7764. E-mail: mifflin@uthscsa.edu. UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION funded by NASA to investigate gastric mucosal cell growth, differentiation, and assembly in simulated microgravity. Experience in cell and molecular biology is essential, biophysics background is a strong plus. Please send curriculum vitae and letters of reference to: **Adam Smolka, Ph.D., Department of Medicine, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425; FAX: 803-792-5311; e-mail: smolkaaj@musc.edu.**

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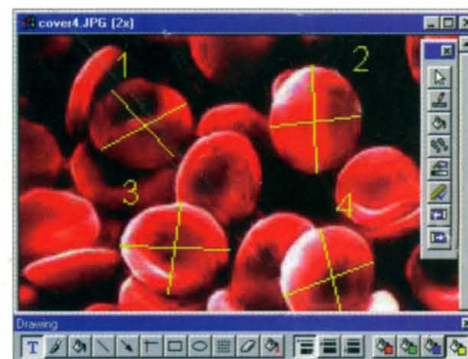
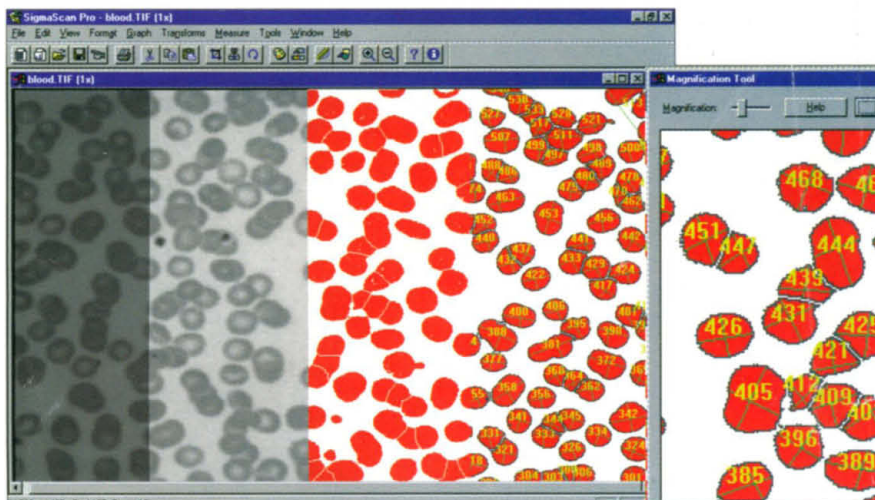
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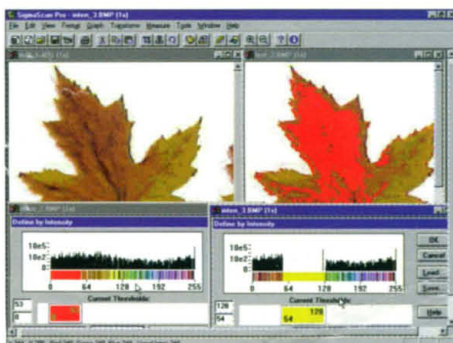


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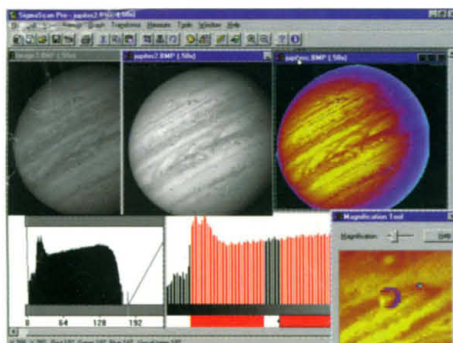
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