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THE 1997 ANNUAL MEETING OF THE

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HAWAII HEPTACHLOR RESEARCH & EDUCATION FOUNDATION Hawaii Heptachlor Health Effects Research Program

REQUEST FOR PROPOSALS

In 1981-82, Heptachlor epoxide contaminated a considerable part of Hawaii's milk supply. This has led to concern that adverse health effects might result from consumption of contaminated dairy products, particularly among children. Studies to identity potential disease problems, and to develop measures to prevent or ameliorate them are sought and will be supported.

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Projects up to two years duration will be considered for funding. For some background information see: Smith, R. Jeffrey, *Science*, Vol. 217, 9 July 1982, p. 137, and Baker, Dean B., et al, *Hawaii Medical Journal*, Vol. 50, No. 3, March 1991, p. 108. **To apply:** Submit a letter of intent of less than 500 words, which includes an estimated budget, to the Foundation. All letters of intent will be reviewed by the Foundation's Scientific Advisory Council for relevance and quality. The Scientific Advisory Council is chaired by Dr. David P. Rall. Only letters of intent received by July 31, 1997 will be reviewed. Submitters will be notified by October 15, 1997 on whether or not to submit full applications for consideration. Copies of the Foundation's research policies are available upon request to the Foundation office.

Send all letters of intent to Hawaii Heptachlor Research & Education Foundation, attn. Rick Scudder, Executive Director, 1188 Bishop Street, Suite 2308, Honolulu, HI 96813. phone (808) 531-2963, fax (808) 531-3050. Email: rscudder@igc.apc.org

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The Department of Medicine at the University of Health Sciences Antigua is seeking qualified individuals for a 4-week VISITING FACULTY appointment from June 16th-July 15th, 1997 for anatomy, pathology, immunology and genetics; August 25th-September 22nd, 1997 for anatomy and genetics; October 6th-November 3rd, 1997 for physiology, pathology, community health and neurology.

Applicants must have Ph.D., or M.D. or combination of Ph.D. and M.D., with teaching experience in the field.

The salary for the 4-week on-campus teaching period is \$4,000.00 (U.S.) with additional \$3,000.00 for the off-campus implementation of the course. The studentfaculty contact during the off-campus portion of the course is via internet. The University will provide round trip airfare with accommodation. Interested individuals should send FAX or Email their résumé (curriculum vitae) with names of three references to: The Search Committee, UHSA School of Medicine, Dowhill Campus, Picadilly, Box 510, St. John's, Antigua. Telephone: 268-460-1391; FAX: 268-460-1477; Email: fmcp@uhsa.edu.ag.

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ASSISTANT PROFESSOR

POSITIONS OPEN

The Department of Obstetrics and Gynecology, F. Edward Hebert School of Medicine, Uniformed Service, University of the Health Sciences, is seeking applications from U.S. citizens for the position of **ASSISTANT PROFESSOR** in the Research Division. For a qualified candidate, tenure-track appointment is available.

Applicants must have a Ph.D. or equivalent with postdoctoral training in endocrinology, cell biology, physiology, and biochemistry with extensive training in molecular biology. Applicants are expected to establish a strong extramurally funded research program in the area of reproductive tract biology. Major duties of the successful applicant will also include: helping the clinical faculty establish individual research projects and overseeing the successful implementation of these investigations; instructing medical students, residents, and fellows during rotations in the laboratory in basic immunological and molecular research techniques including the design of small projects, implementation of the studies, data analysis, and preparation of the material for presentation; and presenting lectures in field of expertise as requested.

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ASSISTANT PROFESSOR. Applications are invited for a faculty position in the Research Division of the Department of Obstetrics and Gynecology at McGill University. Applicants should have a Ph.D. degree, at least three years of post-doctoral experience, and demonstrated excellence in fundamental biological or medical research. The successful applicant will be expected to establish an externally funded research programme in mammalian reproductive or developmental biology and to obtain independent salary support within three years of hiring. Please send a curriculum vitae, statement of research experience and future research plans, and the names and addresses of three referees to: Dr. S. L. Tan, Professor and Chairman, Department of Obstetrics and Gyne-cology, McGill University, Royal Victoria Hospital, Women's Pavilion, Room F4.29, 687 Pine Ave. W., Montreal, Quebec, H3A 1A1. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. McGill University is committed to equality in employment. Applications should be received before July 15, 1997.

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- the administrator of the Award Committee at the address below
- within the Science homepage at http://www.aaas.org/science/ prize.htm
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Qualified candidates will be skilled in protein biochemistry techniques. BS plus minimum 2 years' experience or MS in a related area required. Experience with immunohistochemical and tissue culture techniques is preferred. **Job Code: 2129**

In-Vitro Neuroscientist (BS/MS)

Perform in-vivo experiments to study the effects of drugs on neurotransmitter release. Responsibilities include probe construction, stereotaxic surgery and HPLC analysis. Experience with microdialysis and HPLC troubleshooting is desired. BS plus minimum 2 years' experience or MS in a related area required. **Job Code: 2130**

Located on the shores of Groton, CT, Pfizer can offer a high quality of life in close proximity to New York City, Providence and Boston. We offer competitive salaries and excellent benefits. For immediate consideration, please send your resume to: Manager of Employment, Pfizer Inc, Job Code #____, Central Research Division, Eastern Point Road, Groton, CT 06340. For more information on current career opportunities, please visit our web site: http://www.pfizer.com. We are an equal opportunity employer dedicated to diversity M/F/D/V.



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We Stand on Reputation. We Build On Experience.

Move to the frontier. Discover Microcide.



MICROCIDE PHARMACEUTICALS, INC., an innovative San Francisco Bay Area biopharmaceutical company focused on the discovery and development of novel therapeutic and antimicrobial agents for the treatment of human disease, is seeking highly motivated individuals to join its rapidly growing scientific team in the functional genomics/drug discovery area. Successful candidates will be part of a team of cell biologists, eukaryotic geneticists, molecular biologists, and bioinformaticists working together at the frontier of human drug discovery.

RESEARCH SCIENTISTS/RESEARCH ASSOCIATES • EUKARYOTIC GENETICS • CELL BIOLOGY • MOLECULAR BIOLOGY • AUTOMATION/ROBOTICS • BIOINFORMATICS

We seek qualified, energetic individuals to fill the following positions:

Research Scientist (or Postdoctoral Fellow) in Cell Biology. This position requires a Ph.D. degree in cell biology or biochemistry and experience in the development, validation and performance of eukaryotic *in vivo* functional assays. Additional desirable attributes include a strong publication record, as well as experience with protein chemistry, and gene expression in yeast.

Research Scientist (or Postdoctoral Fellow) in Genetics. These positions require a Ph.D. degree in molecular biology or genetics of bacteria or yeast, and experience with gene expression systems. Individuals should have experience with mutational studies and strain characterization. **Bioinformaticists.** These positions require a B.A./B.S. or M.A./ M.S. degree in bioinformatics, computer science, or a related field. The candidate should have experience with current biological databases, software, and languages including C, C++, and Perl. The ability to work closely and communicate effectively with team members from other scientific disciplines is required.

Research Associates in Genetics, Genomics, Cell and Molecular Biology. These positions require a B.A./B.S. or M.A./M.S. and at least one year of research experience in molecular microbiology/ eukaryotic gene expression, cellular assays, and nucleic acid techniques. Experience with high throughput systems/automation a plus.

Successful candidates for all positions will have excellent communication skills and will have the ability to work both independently and as part of a multidisciplinary team. These are exciting opportunities for scientists with initiative, flexibility, and energy to contribute to a young organization that is emerging as a leader in its field. We offer competitive salaries and excellent benefits. Please send or fax your resume to: Human Resources Dept., Microcide Pharmaceuticals, Inc., 850 Maude Ave., Mountain View, CA 94043. Attn: Human Genetics Group #756. (415) 526-3034. Microcide Pharmaceuticals, Inc., is an Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA COLLEGE OF MEDICINE Beckman Laser Institute

The University of California, Irvine School of Medicine is seeking to fill two full-time tenured line faculty positions, as well as post-doctoral positions, at the Beckman Laser Institute and Medical Clinic.

ASSOCIATE PROFESSOR/FULL **PROFESSOR:** This is for an M.D./ Ph.D. or M.D. clinician scientist who has a demonstrated publication and peerreviewed grant support record in the area of laser interactions with tissue. Candidate must have demonstrated the ability to perform both basic and applied research, that has led to the development of new clinical procedures using lasers. Candidate is expected to coordinate and run an interdisciplinary research program as well as conduct a major clinical program and administer major aspects of a laser outpatient clinic which will include resident training.

ASSOCIATE PROFESSOR/FULL **PROFESSOR**: This position is for a Ph.D. with demonstrated publications and peer-reviewed grant support in the area of tissue spectroscopy and microscopy. Research program should focus on (1) the minimally invasive use of light to characterize tissue and treat disease, and (2) the development of new laser-based microscopy techniques. Candidate must run an interdisciplinary program and have demonstrated the ability to train graduate and postdoctoral students and develop courses in photomedicine/biomedical optics. Candidate will be expected to teach at the undergraduate and graduate levels.

POST-DOCTORAL POSITIONS: Post-doctoral positions are available in the areas of cell biology (motility and organelle function), tissue optics, and laser ablation mechanisms.

Interested candidates are to submit a current curriculum vitae and a letter outlining their qualifications, along with five names and addresses of references to:

Michael W. Berns, Ph.D., Professor Beckman Laser Institute University of California, Irvine 1002 Health Sciences Rd., East Irvine, CA 92612 email reply: job@bli.uci.edu Working on the molecular level to conquer, treat, or prevent debilitating diseases.

DRUG DISCOVERY RESEARCH AT SCHERING-PLOUGH

At the Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on drug metabolism studies.

Our dynamic EXPLORATORY DRUG METABOLISM Team in Kenilworth, NJ seeks the following talented scientists to support Drug Metabolism activities for a number of new development compounds.

PRINCIPAL SCIENTIST

The candidate selected for this senior position will design and conduct studies to evaluate enzyme inhibition, including metabolism-based inhibition. To qualify, you will need a PhD in Biochemistry, Chemistry, Toxicology or a closely related field and at least 6 years of postdoctoral experience. Background must include in-depth knowledge of drug metabolism and pharmacokinetics, specifically cytochrome P-450, as well as enzyme mechanism and kinetics. Extensive knowledge of structure-cytochrome P-450 substrate specificity and structure-cytochrome P-450 inhibition relationships is highly desirable. Excellent interpersonal and verbal/written communication skills are essential. To be considered for this position, please reference Dept. DS-AN-01/KB.

SENIOR SCIENTIST

You will design and implement studies dealing with the various aspects that bridge discovery to development. This will include toxicokinetics, in vitro and in vivo metabolite profiling, and formulation support. You will also be responsible for monitoring contract drug discovery support studies and will be expected to interpret results, prepare related reports and documents for presentation to senior management. To qualify, you will need a PhD in Biochemistry, Chemistry, Toxicology or a related field and at least 3 years of postdoctoral experience in drug metabolism and pharmacokinetics. Background must include designing and conducting studies involving toxicokinetics, absorption, distribution, metabolism elimination and pharmacokinetics under GLP guidelines. In-depth knowledge of drug metabolism research, bioanalytical and pharmacokinetics is also required. Good verbal and written communication skills are essential. To be considered for this position, please reference Dept. DS-AN-02/KB.

SCIENTIST

As a group leader in charge of a dosing group, you will participate in the design and execution of studies to answer specific drug metabolism questions in the drug discovery area. To qualify, you will need a BS degree and 8 years of experience demonstrating proficiency in *in viw* handling and surgery skills or an MS degree and 3 years of experience. Background must include dosing skills via various routes of administration such as oral (gavage, capsule, drug-diet mixture), intravenous, intraperitoneal, intraarterial, subcutaneous, percutaneous and intramuscular. Surgery skills must include cannulation of veins, arteries and bile ducts as well as blood and sample collection techniques. To be considered for this position, please reference Dept. DS-AN-03/KB.

Associate Scientist

As a member of a dosing group, you will participate in studies to answer specific drug metabolism questions in the drug discovery area. To qualify, you will need a BS degree and 4 years of experience which includes dosing via various routes of administration such as oral (gavage, capsule, drug-diet mixture), intravenous, intraperitoneal, intraarterial, subcutaneous, percutaneous and intramuscular. Surgery skills must include cannulation of veins, arteries and bile ducts as well as blood and sample collection techniques. To be considered for this position, please reference Dept. DS-AN-04/KB.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at **http://www.sp-research.com** or send a scannable resume and cover letter referencing the Dept. Code for your position of interest, original copy only, to our Resume Scanning Center at: P.O. Box 92101, Los Angeles, CA 90009. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.

Schering-Plough

Research Institute

Using Science for Human Advantage



Working on the molecular level to conquer, treat, or prevent debilitating diseases.

INFECTIOUS DISEASES DISCOVERY RESEARCH AT SCHERING-PLOUGH

At the Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of exploratory pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on infectious diseases.

SENIOR/PRINCIPAL SCIENTIST Antibacterial Drug Development

In addition to a PhD degree, the successful candidate will have 2-6 years of postdoctoral experience in bacterial physiology and genetics. A strong background in biochemistry or molecular biology is required to select and implement novel targets for antibacterial screening. Experience in high through-put screening or bioinformatics is an asset. To be considered for this position, please reference Dept.KS-SS/DMS.

Assistant/Associate Scientists Antibacterial and Antifungal Target Evaluation

We are seeking several talented scientists with a Bachelor's or Master's degree and 0-4 years of related experience. A strong background in biochemistry, microbial genetics or molecular biology is required for implementation of antibacterial and antifungal targets. Experience in assay development and high through-put screening is a plus. To be considered for this position, please reference Dept. KS-AS/DMS.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at **http://www.sp-research.com** or send a scannable resume and cover letter referencing the Dept. Code for your position of interest, original copy only, to: Human Resources-DMS, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Discover A New Approach To Science

At SmithKline Beecham our mission is to discover new and innovative ways to prevent, diagnose, treat and cure through the union of gifted scientists and leading-edge technology. Our commitment to these discoveries has made us a world leader in R&D, and we continue to gain international recognition for our achievements. Our future is bright and we need talented, innovative individuals to join us in our journey.

VIROLOGIST/ANTIVIRAL DRUG DISCOVERY

As a global leader in anti-infectives, we currently have a challenging opportunity for a scientist to participate in the evaluation and selection of lead compounds as antivirals and to explore new molecular targets for herpes viruses. The selected individual will work in a dynamic environment as part of a multi-disciplinary drug discovery team. Creativity, familiarity with current scientific literature and range of technical abilities will be valuable assets. The selected candidate will possess a BS or MS in Virology. Molecular Biology or related field. Candidates must have the skill to apply molecular and viral techniques, design/conduct successful experiments, keep accurate records and perform data analysis. A minimum of two years' laboratory experience beyond coursework is required. Previous experience in herpes virology is strongly preferred. Refer to Job Code S6-0204.

POSTDOCTORAL SCIENTIST, PHARMACOLOGY

We seek a scientist with a background in molecular and cell biology for our Pharmacological Sciences division. The scientist will investigate transcriptional regulation of cardiac and vascular smooth muscle function. This will entail conducting studies on the discovery of important and novel genes that are involved in the pathogenesis of vascular and cardiac remodeling as well as exploring the role of nuclear/orphan receptors in the control of gene transcription using mobility shift assays and two-hybrid systems. Exploring the functional role of transciptional activation of vascular and cardiac muscle will be a collaborative effort with intra- and extra-departmental scientists. The ideal candidate will be intent on gaining recognition in the scientific community through publication of scientific results and participation in national meetings. A PhD in Molecular Biology, Biochemistry, Pharmacology or related discipline, up to 3 years' postdoctoral experience and knowledge of standard molecular biology techniques are required. Experience with standard techniques in cell biology, biochemistry, in situ hybridization, yeast genetics, and gene transfer techniques and a background in cardiovascular pathology are preferred. Refer to Job Code H5-0105.

Located in a state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package as well as the opportunity for growth in a scientifically intense environment structured on creativity, teamwork and commitment. Qualified candidates should send resume or CV, salary requirements and three references, indicating desired Job Code, to: SmithKline Beecham Pharmaceuticals, Job Code

P.O. Box 2645, Bala Cynwyd, PA 19004. *Indicating Job Code is essential*. For more information on SmithKline Beecham, visit our Web site at http://www.sb.com. We are an Equal Opportunity Employer, M/F/D/V.



Chairperson, Natural History and Epidemiology Coordinating Committee

HEALTH SCIENTIST ADMINISTRATOR/ MEDICAL OFFICER, GS-14/15

National Institutes of Health

Office of AIDS Research

Serves as a senior advisor to the Director, Office of AIDS Research (OAR), on issues concerning Natural History and Epidemiology research on HIV infection and its sequelae; participates in the preparation of the National Institutes of Health (NIH) AIDS Natural History and Epidemiology budget; represents the Director, OAR in this area to NIH and Agency level staff, research institutions, academia, media, and the general public; examines proposed policy changes to the conduct of HIV/AIDS research and advises NIH management on the impact and possible interpretation by a diverse range of groups and organizations including health care providers and the government.

Facilitates and coordinates the efforts of the committee; identifies scientific opportunities; setting research priorities, and enhancing trans-NIH coordination and collaboration. Serves as an OAR ad hoc member of task forces or groups or chairs special purpose groups dealing with HIV/AIDS related research.

Candidates should have knowledge of natural history and epidemiology research of infectious agents, specifically related to HIV; skill in preparing organizational budgets; the ability to prepare verbal and written reports on complex scientific issues; skill in facilitating and coordinating committees.

This is a civil service position with a salary commensurate with experience. Please send a curriculum vitae, resume or an Optional Application for Federal Employment, OF-612 to the National Institutes of Health, OD/OE, Building 31, Room 1C27, 31 Center Drive MSC 2264, Bethesda, Maryland 20892-2264, Attn: Mr. Nelson Rodriguez, Announcement #OD-97-1005. For additional information please call Mr. Rodriguez at 301-496-2511. Full qualification requirements may be obtained by calling 301-402-4111. U.S. citizenship is required. APPLICATIONS MUST BE POSTMARKED BY JUNE 3, 1997. NIH is an Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH National Heart, Lung, and Blood Institute HEALTH SCIENTIST ADMINISTRATORS

Bethesda, Maryland

The Division of Lung Diseases is seeking individuals experienced in immunology, inflammation, virology, molecular biology and/or cell biology to provide administrative scientific support in the management and development of the division's acute lung injury and asthma extramural grant programs.

Candidates must have a M.D., Ph.D. or equivalent, postdoctoral research experience and a strong desire to pursue an administrative non-laboratory career track. The candidates selected will provide leadership for established national programs and develop new programs in his/her area of expertise. Areas of primary interest include acute lung injury and asthma. Specifically, the individuals selected would have responsibility for planning, developing, managing, and evaluating a grant/contract program supporting basic and clinical research. Responsibilities include identifying research priorities, organizing scientific meetings, and closely interacting with leading researchers in the field.

Applicants must be U.S. citizens. Appointment at a Health Scientist Administrator, GS/12-13 level (\$45,939 to \$71,017) or Medical Officer (Research), GS/12-13 level (\$51,470 to \$78,203) anticipated. A Physicians Comparability Allowance may be paid. As a Medical Officer, the incumbent's specific area of expertise is in internal, pulmonary, or critical care medicine.

Call for information or application procedures. Reference vacancy announcement number HL-97-0034. Vacancy to close June 2, 1997. Applications must be postmarked as of the closing date.

National Institutes of Health Personnel Office, NHLBI Building 31, Room 5A28 31 Center Drive, MSC 2484 Bethesda, Maryland 20892-2484 (301) 496-6477 NiH is an Equal Opportunity Employer





Postdoctoral Research Applicants Health Effects Laboratory Division (HELD) in Morgantown, WV National Institute for Occupational Safety and Health (NIOSH) Centers for Disease Control (CDC) Department of Health and Human Resources (DHHS)

HELD is a newly established and funded division at NIOSH/CDC in Morgantown, WV. Unique opportunities for researchers in state of the art laboratories to conduct laboratory based research into potential health effects of workplace agents. Salary commensurate with experience. *NIOSH is an Equal Opportunity Employer*.

Postdoctoral positions are available at NIOSH in the following areas:

Dr. Michael Luster (Chronic Inflammatory and Immune Diseases): Studies the molecular mechanism by which hazardous agents found in the workplace affect chronic inflammatory processes in various organ systems including the skin, liver, lung, and kidney. Current focus is on relationship between ROS, nuclear transcription factors and chemokines.

Dr. Diane Miller (Chronic Stress): Investigates the biochemical, molecular/cellular and functional/whole-animal changes associated with stress and the role these changes play in altering response to workplace chemicals. **Dr. Sally Tinkle** (Dermatotoxicology): Studies the cellular and molecular mechanisms by which occupational hazards dysregulate the antigen-stimulated, cell-mediated immune response in the skin and the lung.

Dr. Ainsley Weston (Molecular Carcinogenicity): Studies the relationships between occupationally related cancer and polymorphism of human cancer-associated genes (eg. p53, H-RAS, BRCA).

Dr. Tong-man Óng (Mólecular Epidemiology): Conducts research on the activation, expression or mutation of proto-oncogenes and tumor suppressor genes in chemically induced transformed cells and/or human biological samples.

Dr. James O'Callaghan (Molecular Neurotoxicology): Investigates molecular and cellular aspects of neuronal and glial response to injury, with expertise in biochemical approaches to assessment of neural injury.

Dr. Steve Reynolds (Genetic Susceptibility): Mapping, identifying, and cloning of cancer susceptibility genes in lung, liver, and skin cancer.

Dr. Alan Poland (Molecular Toxicology): Studies the mechanisms of action of TCDD including pharmacokinetics in normal and isogeneic mice, efficacy (i.e. combined effect of multiple agents) on the Ah-receptor, and developmental expression of Ah-receptor and Arnt in the mouse embryo.

Send resume and cover letter indicating research expertise to:

John Stewart NIOSH/HELD/TMBB 1095 Willowdale Rd., M/S 3014 Morgantown,WV 26505 c/o Post Doc Positions

Imaging Laboratory Scientist



COMMITTED TO WORLDWIDE LEADERSHIP IN HEALTHCARE Wyeth-Ayerst Research, a major division of Fortune 100 American Home Products Corporation, has an opportunity at our pharmaceutical research facility in Chazy, New York for a Scientist in our Imaging Laboratory.

The selected candidate will be responsible for operating a transmission electron microscope (TEM), scanning electron microscope (SEM) and processing images. Responsibilities include processing, embedding, and sectioning tissues in support of electron microscopy services, as well as per-forming histology duties. The incumbent must keep records in compliance with SOPs and GLPs and maintain laboratory instruments in accordance with SOPs, troubleshooting equipment problems as needed.

Requirements include a B.S./M.S. with a minimum of 2 years relevant experience and familiarity with all techniques necessary for the operation of TEM, including tissue preparation and image processing. SEM experience is desirable

The Wyeth-Ayerst Drug Safety Division is located between the foothills of the Adirondack Mountains and the shores of Lake Champlain. The area offers a wide range of outdoor recreational activities while being a short distance from Lake Placid, N.Y.; Burlington, VT; Montreal, Quebec, and Plattsburgh, N.Y. Wyeth-Averst Research offers an excellent compensation and benefits package in a highly professional environment. Please send your resume with salary require-ments to: Wyeth-Ayerst Research, Human Resources Dept., Position #OPSCI-2113, P.O. Box 7886,

WYETH

Philadelphia, PA 19101-7886, or fax your resume (in fine mode if possible) directly into our centralized Research resume database at (610) 989-4854. e-mail: jobs@RAMAIL1.wyeth.com (ASCII for-AYERST mat, no attachments, subject: resume). Principals only. Equal Opportunity Employer, M/F/D/V.

againin Pharmaceuticals Inc.

pidly developing biopharmaceutical company engaged in R&D of naticals to troat serious diseases. We are seeking creative s to join our melecular medicine group in the following areas: cientists to join our m

Post-Doctoral Fellow, Genomics - Experience in positional cloning, gene structure analyses, and cDNA transcript discovery using techniques such as exon trapping is desired. Join a team of scientists looking for gene targets in inflammation.

Post-Doctoral Fellow, Pharmacology and Immunology – Experience in lung airway inflammation and its regulation is desired. Join a team of scientists looking at the function of new genes in airway inflammation, and animal models of asthma. Develop therapeutic strategies for intervention.

Antibody Engineering – Skills in antibody screening and analysis, and molecular engineering of antibody constructs. The individual should be able to lead a group in the development of an antibody therapeutic.

Therapeutic Screening – Demonstrated skills in utilization of high throughput screening systems for pharmaceutical development.

Protein Biochemistry and Engineering Analysis of protein structure and function, including analysis of protein-ligand interactions, and large scale production and purification of recombinant proteins.

For consideration, please submit your curriculum vitae to Human Resources, Magainin Pharmaceuticals, Inc., 5110 Campus Drive, Plymouth Meeting, PA 19462. MPI offers excellent compensation and benefits. EOE. No phone calls, please.

Assistant or Associate Professor of Environmental Health Sciences

Tenure Track

Teach undergraduate courses (air pollution, epidemiology, environmental management/law, environmental physiology, food sanitation, hazardous/solid waste, public health, and vector/rodent control), and conduct research in Environmental/Occupational Health or a closely related discipline. In addition to teaching and research/scholarship, faculty are required to advise students, assist with curriculum development, participate in departmental & college committees, and all other faculty functions, including grant writing.

An earned Ph.D. degree in Environmental Health or a relevant environmental field and expertise in environmental biological areas is required. Candidate should have expertise in modern analytical methods of environmental/toxicological exposure and health risk assessment. Evidence of effectiveness as a teacher and demonstrated ability to publish in peer review journals and success in grant funding are essential. Professional certificate or license, such as PE, CIH would be a plus. Salary: Assistant Professor \$29,931 to \$52,213; Associate Professor \$39,003 to \$62,394 (Depending on qualifications and experience).

Send resume or curriculum vitae with publication list, a concise description of research interests, teaching experience and names, addresses and telephone numbers of three references no later than 6/10/97 to:



Prof. Paul C. Lu (Chair, Search Comittee) Department of Health Sciences YORK COLLEGE (CUNY) 94-20 Guy R. Brewer Blvd Jamaica, NY 11451

York College verifies education & experience statements. Selected candidates must provide proof of identity & employability. AA/EOE/ADA.

University of Illinois at Urbana-Champaign **Department of Crop Sciences**

Assistant Professor of Fungal Plant Pathology/Fungus-Plant Interactions Fungal biologist/molecular biologist with emphasis on fundamental research and complementary teaching in the areas of fungal plant pathology and/or fungus-plant interactions. This is a 9-month tenure track position with opportunity for summer appointment. Responsibilities will be allocated as 75% research and 25% teaching appointments in the Department of Crop Sciences. The successful applicant is expected to develop a nationally recognized, extramurally-funded research program in an area of fungal plant pathology and/or fungus-plant interactions using modern molecular biological approaches. Research emphasis will be on fungi that cause disease on or otherwise interact with soybean and/or other major crop plants of Illinois. The incumbent will participate actively in the teaching program of the department to include offering formal courses in the areas of fungal plant pathology and/or fungusplant interactions, advising undergraduate students, and directing graduate student research. The incumbent will teach a minimum of one course per academic year. A Ph.D. in plant pathology, microbiology, mycology, biology or other related areas in the life sciences is required. Postdoctoral experience and demonstrated ability to employ modern molecular approaches in a research program are preferred. The successful candidate must possess excellent interpersonal and communication skills, and be able to formulate, organize, direct, and carry out independent research. The candidate also must present the clear ability and desire to excel in classroom teaching and in advising undergraduate and graduate students. Salary commensurate with training and experience. Starting date is August 21, 1997, or when a suitable candidate is available. For full consideration, applications will be accepted until June 1, 1997, or thereafter until a suitable candidate is identified. Interested persons should assemble an application packet consisting of an introductory cover letter, a curriculum vitae, and a personal statement of research goals and teaching interests. The packet should be sent to: Professor G. H. Heichel, Head, Department of Crop Sciences, University of Illinois at Urbana-Champaign, 1102 South Goodwin Avenue, Urbana, Illinois 61801. Telephone (217) 333-9480. Applicants must also arrange to have a full set of certified university transcripts and three letters of recommendation sent to the same address, all to arrive on or before the closing date. For additional information, contact: Dr. Stephen K. Farrand, Department of Crop Sciences, University of Illinois at Urbana-Champaign, 240 ERML, 1201 West Gregory Drive, Urbana, Illinois 61801-4798. Telephone: (217) 333-1524.

The University of Illinois is an Affirmative Action/Equal Opportunity Employer. Please cite announcement number 04/97A-5497 when applying.



The National Institutes of Health has introduced a new web site. Now, the latest news about clinical and research training opportunities at NIH can be accessed by visiting us at http://helix.nih.gov:8001/oe/ At the site, you can quickly obtain information regarding clinical and postdoctoral training. Review the NIH

tenure-track openings. Take a look at the NIH Postdoctoral Research Fellowship Opportunities Catalog which chronicles research being conducted in all NIH laboratories. You can even apply electronically for positions. All from the convenience of your keyboard.

Plus, the web site links to all NIH institute and laboratory home pages, provides a calendar of events, and offers links to many other areas.

We used to ask you to call us or send your *curriculum vitae*. Now, the best way to find out about about world class opportunities at NIH is through the world wide web.



Office Of Education http://helix.nih.gov:8001/0e/

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Becton Dickinson, a Fortune 500 Healthcare conglomerate, seeks a Medical Director to bring experience authoritative medical practice knowledge to the business of developing, manufacturing and marketing disposable medical devices for specimen collection products, including VacuTainer and MicroTainer brand blood collection tubes and multi-sample needles, blood collection sets, urine collection containers, and lancets, and products reflecting the future evolution of the clinical laboratory. Our diversity of products

and their international status offers the challenges of a stimulating career and the opportunity for extensive professional growth.

As a member of the Operating Committee for the WW Specimen Collection Business, you will play a significant role in interpreting the current and rapidly evolving practice of laboratory medicine in the U.S. and internationally.

In addition, you will

- lead in defining the the clinical aspects of business strategy, and in developing and implementing processes by which the business comes to an in-depth understanding of the needs and requirements of its clinical customers;
- organize a program of clinical investigation which determines the risks and benefits of proposed new products and manufacturing process changes, troubleshoots problems related to BD products and leads to new scientific knowledge;
- develop educational materials which both present Becton Dickinson and its products to the professional medical community and provide interpretations of scientific information to non-medical BD employees.

To qualify, you must be a BC/BE physician with both training and experience in clinical pathology. This training/experience should include the U.S. plus at least one other major region (e.g., Europe or Asia), and would ideally span laboratories of very different sizes. Specialty training would be thought valuable, and demonstrated skill in clinical investigation is strongly desired. The candidate should be steeped in trends in technology with a global perspective and be able to recognize new product opportunities in both medical and laboratory practices as well as to quantify device value in use. We seek someone who desires to make an impact on global healthcare, but who maintains a spirit of humility. You should have strong oral and written communication skills, and significant capability in conflict resolution and personnel management.

In exchange for your skills, we offer competitive salaries and comprehensive benefits. For prompt, confidential consideration, please send your resume and salary requirements to the Vice President, Medical Affairs, Becton Dickinson and Company, One Becton Drive, Franklin Lakes, NJ 07417. We are an equal opportunity employer.

Helping All People Live Healthy Lives

POSITIONS OPEN

RAMAPO COLLEGE, a public, barrier-free institution offering baccalaureate and selected masters degrees, approximately 25 miles from New York City, is committed to "global education." On-site child care is available.

FACULTY POSITION—FALL 1997

ASSISTANT PROFESSOR of Biology, School of Theoretical and Applied Science—One year appointment renewable on a year-to-year basis for a maximum of three years. Applicants should have a background in molecular aspects of development or neuroscience in invertebrates. Should have experience in and commitment to teaching introductory courses in biology to majors and non-majors, as well as specialty courses. The applicant should have an ongoing research project that is appropriate for undergraduate involvement. Participation in student advisement and committee work is required for this position. Ph.D. or ABD with imminent completion date required. Two years of college teaching experience desirable.

Since its beginning, Ramapo College has had a intercultural/international mission. Please tell us how your background, interest and experience can contribute to this mission, as well as to the specific position for which you are applying. To request accommodations, call: 201-529-7498; FAX: 201-529-7508. The review process will commence May 31, 1997 and continue until the position is filled. Please submit letter, curriculum vitae and addresses and telephone numbers of three references to: Dr. Joseph Dallon, Search Committee Chair, School of Theoretical and Applied Science.

Ramapo College of New Jersey Department 54 505 Ramapo Valley Road Mahwah, New Jersey 07430

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FACULTY POSITIONS GENOMICS AND SIGNAL TRANSDUCTION/ CELL CYCLE

The Department of Molecular Genetics, Biochemistry, and Microbiology invites applications or nominations for two tenure track ASSISTANT PROFESSORS. One position is in genomics and the other is in signal transduction and/or cell cycle regulation. We are particularly interested in individuals with the capability and desire to take advantage of the information revolution being generated by the human genome project. With 26 fulltime faculty, we maintain strong active research programs in a variety of disciplines including differentiation, developmental and cancer biology; human genetics; molecular and cellular immunology; structural biology; viral and mcirobial pathogenesis, and membrane transport. We sup port an active graduate program and maintain core facili-ties accessible to all university faculty for production of transgenic and knockout mice and DNA synthesis and sequencing. These opportunities are complemented by mouse physiology and pathology services provided by other departments, as well as by the Barrett Cancer Center and the Cardiovascular Center, which together provide a breadth of research opportunities unparalleled at most re-search institutions. Our program can also be visited through our home page at http://ucmg65.med.uc.edu. Interested applicants should submit a curriculum vitae, brief description of research program, and the names of three qualified references to: Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry, and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0524. An Affirmative Action Equal Opportunity Employer.

CLINICAL MICROBIOLOGIST

Ph.D. or board-certified M.D. pathologist with clinical specialized training and/or experience in microbiology to serve as director of clinical microbiology laboratory in Division of Laboratory Medicine of academic pathology department. Responsibilities of the position include clinical service, teaching and research. Academic rank according to qualifications.

Please submit curriculum vitae and names of three references to: Gabriel M. Mulcahy, M.D., Chief of Laboratory Medicine, UMDNJ-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103. FAX: 201-982-3199; Email: mulcahy@umdnj.edu. An Affirmative Action/Equal Opportunity Employer, Minorities/Fenades/ Disabled/Veterans, and a member of the University Health System of New Jersey.

POSITIONS OPEN

GROSS ANATOMIST—The Department of Anatomy at The University of Health Sciences College of Osteopathic Medicine seeks to fill an **ASSISTANT** or **ASSOCIATE PROFESSOR** position. Applicants should have a Ph.D. in Anatomy with experience in teaching human gross anatomy (lecture and laboratory dissection). The person filling this position must have strong interest and commitment to teaching medical students. Other duties include scholarly work such as research or writing; active participation in departmental activities and professional development; service to the University on committees; and advising medical students. We are looking for a positive team player with exemplary professional characteristics.

Salary is dependent on qualifications and experience; excellent benefits. Qualified applicants should send their applications including curriculum vitae, a statement of teaching philosophy and scholarly interests, and the names and telephone numbers of three references to: Dawn M. Harrington, Director of Human Resources, The University of Health Sciences-COM, 2105 Independence Boulevard, Kansas City, MO 64124-2395.

The successful candidate should start in the 1997-1998 academic year. Pre-employment drug screen required. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY INVERTEBRATE BIOLOGIST

Bemidji State University invites applications for a fixed-term, full-time position beginning Sep-tember 3, 1997. Qualifications: Ph.D. in some area of invertebrate biology. Competence in invertebrate ecology, natural history, systematics, and evolution. Specialization in aquatic invertebrates, knowledge of classical and molecular taxonomy desired. Individuals with a completed doctorate and teaching experience will be given preference. The responsibilities for this position may involve teaching and preparing laboratories in general biology, invertebrate anatomy, entomology, parasitology, freshwater invertebrates, and limnology. The individual will also be required to advise undergraduate and graduate students biology programs and to develop an active research program involving students. Applica-tion postmarked deadline is May 27, 1997, or until filled. A letter of application, résumé, copies of transcripts of all graduate courses, and the names, addresses, and telephone numbers of three or more references should be sent to: Dr. Kenneth R. Lundberg, Dean, College of Social and Natural Sciences, Bemidji State University, Bemidji, MN 56601-2699. FAX: 218-755-2822. Email: krlundberg@vax1.bemidji. msus.edu. Detailed information is accessible on the nternet at: http://bsu -personnel/job_list.htmlx. http://bsuweb.bemidji.msus.edu/ internet

Benuidji State University is an Equal Opportunity Affirmative-Action Employer/Educator.

SCIENTIST with M.S. or Ph.D. in a biological science and strong computer abilities needed to provide computer assistance to Biochemistry Department. Opportunity for research may be available. Salary negotiable. Apply to: Dr. J. Mahaney, Department of Biochemistry, P.O. Box 9142, West Virginia University, Morgantown, WV 26506. Email: jmahaney@wvu.edu. Equal Opportunity/Affirmative Action.

The University of Florida seeks applicants for the position of **INSTRUCTOR** in Medicine in the Division of Cardiology, Department of Medicine. M.D. degree, BC/BE in cardiology. Experience in heart transplantation and echocardiography. Salary and benefits commensurate with experience. Recruiting deadline: May 22, 1997. Anticipated starting date: July 1, 1997. Please reply with curriculum vitae to: **Barry D. Bertolet, M.D., Chairman Search Committee, Division of Cardiology, Box 100277, JHMHC, Univer**sity of Florida, Gainesville, FL 32610. An Equal Opportunity/Affinative Action Employer.

POSITIONS OPEN

PANORAMA RESEARCH INSTITUTE

San Francisco Bay Area research institute seeks entrepreneurial biomedical **SCIENTISTS** with RO1 or other funding. All areas of biomedical research considered, including: cellular and molecular biology, pharmacology, chemistry and biochemistry. **PRI**, 2462 Wyandotte Street, **Mountain View, CA 94043.** FAX: 415-694-7717; Telephone: 415-694-4996.



The United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Beltsville, Remote Sensing and Modeling Laboratory, is accepting applications for a permanent, full time **RESEARCH PHYSICAL SCIENTIST** or **BIOLOGICAL SCIENTIST** or **BIOLOGICAL SCIENTIST**. TIST, or related discipline. The objective of this position will be to develop relationships between the multispectral properties of plants and their environment with emphasis on crop growth, development and yield for agricultural and natural resource applications. The incumbent will formulate relationships between plant response to the environment and spectral properties measured by a wide range of airborne and spaceborne sensors and will evaluate utility of the present and proposed remote sensing systems for applications in agricultural and environmental assessment. Candidates must have a strong knowledge of environmental remote sensing, image analyses, aerial photography and mathematical modeling and must have working knowledge in one or more of the plant and agronomic sciences. Candidates must have demonstrated ability to initiate and conduct independent research in the fields of remote sensing and crop modeling and publish the research results in peer reviewed journals. Skills in mathematical, statistical, and computer sciences necessary to perform quantitative research are required. Knowledge of the science and technologies of electrooptical imaging systems and aerial photography including calibration and atmospheric correction are required. Candidates must possess a Ph.D., in biological sciences, physical sciences, chemistry, natural resources management, engineering or a related discipline appropriate for the position. The starting salary range is \$45,939 to \$64,629. Candidates for these positions must be U.S. citizens and must address and meet specific qualification requirements defined in the Vacancy Announcement #ARS-D7B-0118. For information about the research program and positions contact: Remote Sensing and Modeling Laboratory at 301-504-5846. Applicants must call 301-344-4638 for a copy of the announcement and application procedures. Applications must be postmarked by the closing date, June 30, 1997. Incomplete applications will not receive consideration. USDA/ARS is an Equal Opportunity Employer.

BIOLOGICAL APPLICATIONS OF NANOFABRICATION TECHNOLOGY

The National Nanofabrication Users Network (NNUN), a collaboration of five university nanofabrication facilities (Cornell, Howard, Penn State, Stanford, and UC-Santa Barbara), seeks to add two additional **STAFF MEMBERS**, to be located at an East Coast and a West Coast site respectively. They will play a hands-on role supporting biology and biomedical NNUN users via training, guidance, and process development for biological applications. They will play an outreach role in helping to raise awareness of the potential of nanofabrication among the biology community.

Appointments will be for 3 years (renewable). Successful candidates will hold the Ph.D. or M.D. in a relevant biology or biomedical field, or will hold the Ph.D. in engineering or a physical science with a strong background and interest in a relevant area of biology. Handson clean room experience in nano- or microfabrication would be a strong plus. Some travel required. Please submit applications by June 1, 1997 for the East Coast to Prof. Noel C. MacDonald, Director, Cornell Nanofabrication Facility, Knight Laboratory, Cornell University, Ithaca, NY 14853. For the West Coast: Prof. James D. Plummer, Director, Stanford Nanofabrication Facility, CIS 114, MC 4070, Stanford University, Stanford, CA 94305.

POSTDOCTORAL POSITIONS AT THE NATIONAL CANCER INSTITUTE

The Laboratory of Leukocyte Biology under the direction of Francis Ruscetti, Ph.D., in the Division of Basic Sciences of the National Cancer Institute, Frederick Cancer Research and Development Center has several postdoctoral training positions available. The laboratory and its independent investigators cover a diverse range of interests including: hematopoiesis, viral pathogenesis, signal transduction, cell cycle control, and transcriptional regulation to name a few. Positions are available under the direction of the following investigators:

Francis Ruscetti, Ph.D. (ruscettif@ ncifcrf.gov): Research will focus on interactions between positive and negative regulators in the control of hematopoietic stem cell function, molecular determinates of the regulation of c-kit expression by transforming growth factor- β , and mechanisms of chemoprotection of hematopoietic cells by cytokines including gene transfer. Candidates should have a strong background in molecular and cell biology.

David Derse, Ph.D. (derse@ncifcrf.gov): Research is focused on the molecular genetics of human retroviruses, specifically aimed at the regulation of viral RNA synthesis, splicing and transport and on cell-virus interactions. Candidates will have an interest in virology and RNA metabolism.

Ira O. Daar, Ph.D. (daar@ncifcrf.gov): Studies are aimed at understanding the cellular interactions and signal transduction events elicited by a member of the Eph family of tyrosine kinases and candidate ligands. Emphasis is on signal function during *Xenopus laevis* embryonic development. Candidate should have strong background in molecular, cellular, or developmental biology.

Diana Linnekin, Ph.D. (linnekin@ ncifcrf.gov): Studies of signal transduction mechanisms of hematopoietic growth factors. The major focus is directed towards delineating the biochemical and molecular mechanism of stem cell factor, the ligand for the receptor tyrosine kinase c-kit. Applicants should have a strong background in molecular, cellular, or developmental biology.

Doug Ferris, Ph.D. (ferris@ncifcrf. gov): General focus is on cell cycle regulation with particular emphasis on mammalian polo-related kinases, their regulation, functions, and physiological partners and substrates. Applicants should have knowledge of cell and molecular biology.

William J. Murphy, Ph.D. (murphy@ ncifcrf.gov): Bone marrow transplantation. Using both in vivo and in vitro model systems, our laboratory is examining the immunobiology underlying marrow graft failure, graft-versushost disease (GVHD), immune deficiency following the transplant, and when used for the treatment of cancer, relapse of the tumor.

For more detailed descriptions of the laboratory, its investigators and research visit our Website at: http://www.nci.nih.gov/intra/llb/ llbpage.htm. Candidates must be U.S. citizens or permanent residents and have less than five years postdoctoral experience. Correspondence, names of references and CV should be sent to the respective investigator(s), Laboratory of Leukocyte Biology, Bldg. 567, NCI-FCRDC, Frederick, Maryland 21702-1201 or via email.



POSITIONS OPEN

STRESSGEN BIOTECHNOLOGIESCORP

StressGen Biotechnologies is a growing biopharmaceutical company developing medical applications of the cellular stress response. Stress-Gen's R&D programs focus on utilizing stress proteins as immunomodulatory agents in therapeutic applications.

StressGen Biotechnologies Corp. has immediate openings for experienced, technically qualified scientific staff to join our Protein Chemistry group. Candidates must have the following qualifications:

RESEARCHER POSITIONS

B.Sc. or M.Sc., experienced in the purification or QC analysis of recombinant DNA produced proteins.

SCIENTIST POSITIONS

Ph.D. with a minimum of five years industrial experience in the development of purification processes for biopharmaceutical proteins. Please send curriculum vitae in care of:

Human Resources—#2/97—R&D StressGen Biotechnologies Corporation #120-4243 Glanford Avenue Victoria, British Columbia V8Z 4B9 FAX: 250-744-2877

We thank all candidates for applying. Only those under consideration will be contacted. Please—no phone calls or drop ins.



United States Department of Agriculture

The Animal Improvement Programs Laboratory (AIPL) and Gene Evaluation & Mapping Laboratory (GEML) are seeking a **RESEARCH GENETICIST** (animal) to work on estimation of gene effects for elite dairy cattle populations. Duties include development of improved procedures to search for quantitative trait loci and to estimate effects of alleles, comparison of properties of estimators when applied to real or simulated genetic marker data, and development of profitable strategies for use of genetic markers by the dairy industry. Ph.D. in animal breeding or a related field is desirable; knowledge of molecular and population genetics, quantitative genetics, and statistics is required. Must be U.S. citizen. Annual salary is commensurate with experience (GS-11 \$38,330; GS-12 \$45,939). For information on the research program, contact: Duane Norman, AIPL, 301-504-8334, dnorman@aipl.arsusda.gov, or Caird Rexroad, GEML, 301-504-8342, crexroad@ ggpl.arsusda.gov. For information on application procedures/forms, call: 301-344-4638. Application proce-should be marked D7B-098-ad18 and mailed by June 2, 1997, to: USDA-ARS, BAHQOB, 6305 Ivy Lane, Room 361, Greenbelt, MD 20770, ATTN: Robin Mazyck.

The U.S. Department of Agriculture is an Equal Opportunity Employer.

AVIAN ECOLOGIST

The Platte River Whooping Crane Trust, a non-profit organization that protects and manages habitat for migratory birds, is seeking an AVIAN ECOLOGIST. Advanced degree; experience in field identification and monitoring of migratory birds; strong communication skills; and commitment to conservation required. Expertise with cranes, grassland birds, endangered species, grassland and woodland management, GIS, and farm operations desirable. Responsibilities include conducting and coordinating field studies and development of the Trust's Habitat Management Plan. Full job description available. Send a cover letter, résumé, salary history, and names of three references to: Dr. Paul J. Currier, Platte River Trust, 2550 Diers Avenue, Suite H, Grand Island, NE 68803. Telephone: 308-384-4633; FAX: 308-384-4634; Email: currier@ hamilton.net. Closing date May 30, 1997.

POSITIONS OPEN

RESEARCH ASSOCIATE in Transplantation. Requirements: Ph.D. or background in immunology. Send curriculum vitae to: Dinesh Ranjan, M.D., University of Kentucky Medical Center, Department of Surgery, C451 Transplant Center, 800 Rose Street, Lexington, KY 40536-0084.

POSTDOCTORAL RESEARCH SEATTLE BIOMEDICAL RESEARCH INSTITUTE

Funded POSTDOCTORAL positions are available in the following areas: Molecular pathogenesis of tuberculosis (Gerard Cangelosi, PI), molecular analysis of antifungal drug resistance in *Candida* (Theodore White, PI), viral variation and chemokine receptor usage in SIV and HIV pathogenesis (Nancy Haigwood, PI), molecular and cellular biology of trypanosomes and Leishmania (Marilyn Parsons, PI), molecular biological or bioorganic aspects of detoxication (John Cashman, PI). Candidates must have a doctoral degree and experience in a relevant area of biomedical research. Seattle Biomedical Research Institute (http://www.sbri.org) is a nonprofit research institution focusing on basic science and is affiliated with the University of Washington. Please send curriculum vitae, the names of three references, and an indication of research interests to: Susan Shearer, Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109. FAX: 206-284-0313. Email: sshearer@ sbri.org. An Equal Opportunity Employer.

POSTDOCTORAL POSITION CALCIUM SIGNALING

Position available immediately in an NIH-funded project investigating a novel non-capacitative calcium entry pathway activated by arachidonic acid (*J. Biol. Chem.* 271: 21720-21725). Experience in either biochemistry of phospholipases, or whole-cell patchclamp electrophysiology required. Contact: Trevor J. Shuttleworth, Ph.D., Dept. of Pharmacology and Physiology, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642. Email: shut@pharmacol.rochester.edu.

POSTDOCTORAL POSITIONS are available to study the role of molecular chaperones in cellular protein folding and to characterize yeast heat-shock proteins involved in the regulation of signal transduction and the cell cycle. Candidates should have experience in yeast molecular biology and a strong background in protein biochemistry is desirable. Please send curriculum vitae and names and addresses of three references to: Jörg Martin, Ph.D., Department of Molecular Biology, Cell Biology and Biochemistry, Brown University, Box G-J2, Providence, RI 02912. Email: jorg_martin@brown. edu. Brown University is an Equal Opportunity/Affimative Action Employer.

POSTDOCTORAL POSITION available to study structure/function relationships in prokaryotic and eukaryotic sarcosine oxidoreductases, enzymes that may contain multiple subunits, several redox centers and binding sites for tetrahydrofolate and other substrates. Candidates should have a strong background in enzymology and molecular biology. Send curriculum vitae, including names and telephone numbers of three references to: Dr. Marilyn Jorns, Allegheny University, Department of Biochemistry, MS 411, Broad and Vine, Philadelphia, PA 19102. Email: jornsm@allegheny.edu.

POSTDOCTORAL FELLOWSHIP available to study the mechanisms of tumorigenesis by the myb oncoprotein. Requires Ph.D. in molecular/cellular biology/biochemistry and background in gene/protein overexpression and analysis. Will use cell culture and transgenic animal approaches to assess myb-dependent cell transformation *in vivo* and *in vitro*. Send curriculum and references to: Richard Press, M.D., Ph.D., Oregon Health Sciences University, Pathology L113, Portland, OR 97201, Email: pressr@ohsu.edu.

POSTDOCTORAL POSITION available to study the molecular pathology of human and experimental skin, head, and neck neoplasia with special emphasis on tumor progression. Background in the molecular biology of cell cycle regulation and/or metalloproteinases is desirable. Interested candidates please send curriculum vitae to: Dr. Andres Klein-Szanto, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION

POSTDOCTORAL position available in sequenced based molecular investigations of bacterial pathogens. Projects involve sequenced based molecular epidemiologic investigation of *Mycobacterium tuberculosis* in conjunction with population based surveillance as well as investigations of nosocomial pathogens. Strong background in molecular biology and population and evolutionary microbiology required. Please send curriculum vitae and three references to: Dr. Henry M. Blumberg, Emory University School of Medicine, Department of Medicine, Division of Infectious Diseases, 69 Butler Street, Atlanta, GA 30303. Emory University is an Equal Opportunity Employer.

MULTIDISCIPLINARY POSTDOCTORAL TRAINING

A new National Science Foundation Biology Research Training Group at the University of California, Davis, invites **POSTDOCTORAL** applications from United States citizens and permanent residents. This multidisciplinary program is designed to provide biologists with sufficient mathematical skills and applied mathematicians with sufficient biological knowledge to solve problems in cell physiology, neurobiology, biofluiddynamics, ecology, and population biology. Applicants should see the Research Training Group webpage http://www.itd. ucdavis.edu/rtg for information about applications, which are due by June 1, 1997.

POSTDOCTORAL POSITION, funded by NIH and Human Frontier Science Program, available for structural studies of helicases, using electron microscopy and computed image analysis. Recent work in our laboratory (e.g., Nature Struct. Biol. 4, 101-104, 1997; J. Mol. Biol. 266, 217-222, 1997) is aimed at understanding the function of hexameric helicases involved in DNA replication, recombination, repair and transcription. Candidates should have a strong background in either electron microscopy or computed image analysis. Send curriculum vitae plus names of three references to: Prof. Edward H. Egelman, Department of Cell Biology and Neuroanatomy, University of Minnesota Medical School, 321 Church Street SE, Minneapolis, MN 55455.

POSTDOCTORAL POSITION available August 1, 1997 to investigate chemokines as mediators of liver injury. Strong emphasis on alcoholic liver disease. Research focuses on the mechanism of ethanol-induced chemokine production in the liver, and the biologic consequences of chemokine production by liver cells. Expertise in molecular biology and cell culture is essential. Experience with liver-specific gene delivery systems is desirable. Send curriculum vitae and names of three references to: Dr. Jacquelyn Maher, Department of Medicine, San Francisco General Hospital (UCSF), Building 40 Room 4102, 1001 Potrero Avenue, San Francisco, CA 94110. Email: jmaher@medsfgh.ucsf.edu.

POSTDOCTORAL POSITION in Plant Molecular Genetics available to study the "hormone-like" effects of sucrose on plant gene expression and development, using *Arabidopsis thaliana* as a model system. Experience with molecular biology, genetics, biochemistry and/or plant biology required. Send curriculum vitae and have three letters of reference sent to: Dr. Sue Gibson, Department of Biochemistry and Cell Biology - MS140, Rice University, Houston, TX 77005-1892; FAX: 713-285-5154; Email: sig@bioc.rice.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION to investigate mechanism of preferential DNA damage in transcriptionally active genes by metabolically activated chemicals is available immediately. Send letter of interest, curriculum vitae and names of three references to: J.C. States, Ph.D., Institute of Chemical Toxicology, Wayne State University, 2727 Second Avenue, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affinnative Action Employer. Women and minorities are especially encouraged to apply. Wayne State University—People working together to provide quality service.

POSTDOCTORAL POSITION to investigate the hormonal regulation of transcription in the liver by steroid hormones and cAMP. Please send curriculum vitae and names of three references to: Edwards A. Park, Department of Pharmacology, University of Tennessee, 874 Union Avenue, Memphis, TN 38163, or FAX: 901-448-7300, or Email: epark@utmeml.utmem.edu. The University of Tennessee, Memphis is an Equal Employment Opportunity/Affirmative Action/Title VII/Title IX/Section 504/ Americans with Disabilities Act employer.

Pharmacia Biotech AB, with headquarters in Uppsala, Sweden, develops. manufactures and markets chemicals, instruments and systems for biotech industry. The company is recognised as one of the leading global suppliers with its products for the manufacture and analysis of genes and gene products.

Customers are found at universities and research institutes, in research departments of pharmaceutical and biotechnology companies as well as in pilot scale and full scale production plants for drug and biopharmaceutical manufacturing.

Pharmacia Biotech has approximately 2 500 employees around the world.

Pharmacia Biotech is a business area with its own legal and operative organization within the Pharmacia & Upjohn group.

Additional information about Pharmacia Biotech is available at: http:// www.biotech.pharmacia.se

Research Scientists

The R&D Division provides the expertise to conduct Pharmacia Biotechs R&D programs. Core technologies are organic and polymer chemistry, surface and ligand chemistry, biochemistry, molecular biology, biomolecule separation techniques and system design and development. We are currently expanding into new areas and need to strengthen the R&D organization in Uppsala with new competences. We are looking for enthusiastic and dedicated scientists of the highest calibre.

Organic Chemistry

- Structure-function relationships, Ref nr 97:34 We are seeking an organic chemist with strong structure-activity relationship emphasis. You will be studying structure-function relationships in the development of ligand technology based on combinatorial chemistry. For further information, E-mail: tomas.nyhammar@eu.pharmacia.com

Biochemistry

- Separation science, Ref nr 97:38 We are seeking a scientist to study physical and physical/ chemical properties affecting the performance of chromatographic materials. Such studies include mass transport, adsorption characteristics, kinetics etc. For further information, E-mail: rolf.hjorth@eu.pharmacia.com

Biochemistry

- Surface interactions, Ref nr 97:42 We are seeking a scientist to study interactions between biomolecules and separation materials at the molecular level. Experiences in surface chemistry, biochemistry and/or biomaterial science is required. For further information, E-mail: rolf.hjorth@eu.pharmacia.com

Analytical Chemistry

- Chemometry, We are seeking a scientist to introduce new characterization strategies and methodology for chromatography and electrophoresis materials. You are a person skilled in chemometric methodology For further information, E-mail: bolennart.johansson@eu.pharmacia.com

Application specialist, Ref nr 97:41

We are seeking a scientist to be responsible for novel biomolecular separation methods using liquid chromatography. You should be experienced in protein expression and purification. For further information, E-mail: ake.danielsson@eu.pharmacia.com

Polymer Chemistry

- Surface chemistry, Ref nr 97:39 We are seeking a polymer chemist or surface chemist whose competence will be utilised in the fields of suspension polymerisations, surface modification of polymeric materials and synthesis of hydrogels. For further information, E-mail: ingrid.porrvik@eu.pharmacia.com

Polymer Chemistry

- Material sciences,

Ref nr 97:40

We are seeking a polymer chemist with emphasis on synthesis and characterisation of advanced polymeric materials. You will be involved in synthesis and characterisation of porous materials, materials selections for analytical devices and in surface modification of materials. For further information, E-mail: ingrid.porrvik@eu.pharmacia.com

For all the positions above, we are seeking highly motivated and experienced PhD's with excellent communication skills. Experience of working in an international environment is desirable. Your application should consist of a full CV including at least two referees and a list of publications.

Research Engineer Biochemistry - Analytical chemistry, Ref nr 97:37

We are seeking a research engineer to specify and verify new chromatography products. You will also work with method development for laboratory scale purification and analysis of proteins, peptides and oligonucleotides. For this position we are seeking a highly motivated B Sc or M Sc with excellent communication skills and long experience in chromatographic method development.

For further information, E-mail: margareta.tennander@eu.pharmacia.com

For general information about the positions, please contact Human Resources, Kristina Östberg, E-mail: kristina.ostberg@eu.pharmacia.com

Application should be sent to Pharmacia Biotech AB, Human Resources, Nina Holm, S-751 82 Uppsala, Sweden. Fax nr +46 18 16 64 47 or E-mail: nina.holm@eu.pharmacia.com The closing date for applications will be May 23, 1997.



Ref nr 97:35

POSITIONS OPEN

CHEMISTRY FACULTY TENURE-TRACK MASSACHUSETTS INSTITUTE OF TECHNOLOGY DEPARTMENT OF CHEMISTRY

The Department of Chemistry invites applications for tenure-track positions in all areas of chemistry. While the preferred level of appointment is at the rank of **ASSIST**-**ANT PROFESSOR**, applications for appointment at more senior levels are also welcome. Outstanding individuals with a strong commitment to research and teaching are encouraged to apply by arranging to have a curriculum vitae, a brief description of research plans, and three letters of recommendation sent to: **Professor Stephen J.** Lippard, Department of Chemistry, 18-399, Massachusetts Institute of Technology, Cambridge, MA 02139-4307 by October 1, 1997.

MIT is an Equal Opportunity, Affirmative-Action Employer and encourages applications from minorities and women.

POSTDOCTORAL POSITION NATIONAL CANCER INSTITUTE

Position available to study the regulation of apoptosis and gene expression in the immune system by the tumor necrosis factor receptor superfamily. Initial focus of this recently formed laboratory is the evaluation of the roles of the TRAF and IAP signaling proteins in the regulation of the transcription factor NF- κ B and the JNK family of protein kinases. *Candidates nunst be U.S. citizens or permanent residents* and have a Ph.D. or M.D. with five years or less postdoctoral experience. Strong expertise in molecular and cellular biology is essential.

Please send applications together with the names of three references to: Dr. Colin Duckett, c/o Jean Decker, National Cancer Institute, NIH, Building 10, Room 4N115, Bethesda, MD 20892-1374. The NIH is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Multidisciplinary research laboratory is seeking highly motivated Ph.D.s with experience in cellular and molecular biology techniques to study aspects of growth factor-receptor interactions leading to signal transduction. Experience in receptor biochemistry and *in vivo* models is desirable. Send curriculum vitae, summary of research experience and interests, and three letters of recommendation to: **Prof. Ram Sasiackharan, Whitaker College of Health Sciences and Technology, 50 Ames Street, Cambridge, MA 02139. Fax: 617-258-9409; Email: rammar@mit.edu**

ANATOMIST

Exciting opportunity exists for **ANATOMIST** to team teach anatomy in new osteopathic medical school being built in the scenic mountains of eastern Kentucky. Rank commensurate with experience. The successful candidate will spend approximately 50% of his or her time teaching and 50% in research/service. For immediate consideration send or FAX letter of interest and résumé to: **Dr. John Strosnider, Dean, School of Osteopathic Medicine, Pikeville, College, 214** Sycamore Street, **Pikeville, KY 41501-1194. FAX:** 606-432-9328.

VIRAL MOLECULAR BIOLOGY/GENETICS

We anticipate offering several positions in the Pacific Northwest for **SENIOR SCIENTISTS** at the doctorate level and several support positions at the research associate level during 1997. Experience sought includes viral microbiology, bacteriophage genetics, viral vector expression systems and infectious diseases/molecular biology. Please respond in confidence with a letter of interest, a statement of direct experience and a résumé to: *Science*, **PO Box 76, 1200 New York Avenue, NW, Washington, DC 20009**.

POSTDOCTORAL POSITION to study synapse formation at the neuromuscular junction (J. Biel. Chem. 271:19752, 1996; 272:10367, 1997). Ph.D. in biochemistry or neuroscience. Experience with molecular biology and cell culture techniques required. Send a statement of interest, curriculum vitae and three references to: Dr. Lin Mei, Department of Pharmacology, University of Virginia, Box 448, Charlottesville, VA 22908.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS M.D. ANDERSON CANCER CENTER CAREER SCIENTIST Assistant Professor (Tenure-Track)

The Department of Gastrointestinal Oncology & Digestive Diseases is currently seeking a candidate to establish a successful, independent, peerreview funded research program in gastrointestinal malignancies with particular emphasis on pancreatic cancer. Candidate must have expertise in molecular mechanisms of cell growth, oncogenesis, oncogenes, tumor suppressors, transcription, genetic predisposition to cancer or translation of molecular mechanisms of oncogenesis to patient care. Start-up package and salary support commensurate with experience.

Send curriculum vitae, summary of research interests and references to: James L. Abbruzzese, M.D., Chairman, Department of G.I. Oncology & Digestive Diseases, Box 78, The University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.

Women and minorities candidates are encouraged to apply. Equal Employment Opportunity. Smoke-free Environment.

Faculty Position in Conservation Medicine. Tufts University School of Veterinary Medicine offers a position in the Department of Environmental and Population Health at its new Center for Conservation Medicine.

Seeking veterinarian with advanced degree or equivalent experience in conservation, two years of international field experience related to wildlife. Primate conservation experience desirable. Candidates should demonstrate the following attributes: experience in and enthusiasm for teaching and mentoring; proven research and communication skills; effective grantsmanship; commitment to fostering the close teamwork necessary to make a multiinstitutional consortium function smoothly; willingness to travel internationally.

Position offered at ASSISTANT/ASSOCIATE PROFESSOR level. Salary commensurate with experience, includes benefits.

Submit letter by July 1, 1997 describing experience and goals, curriculum vitae, and three letters of reference to: Dr. Mark Pokras, Tufts University School of Veterinary Medicine, 200 Westboro Road, North Grafton, MA 01536.

Tufts University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH POSITION

The Department of Obstetrics and Gynecology at Rush-Presbyterian-St. Luke's Medical Center invites applications for the position of **DIRECTOR** of the Gynecologic Oncology laboratory. Our laboratory currently focuses on cell-cell interaction and signal transduction pathways in cervical carcinoma and intraepithelial neoplasia. We are seeking candidates who would translate this research into fundable clinical research projects. Qualifications: M.D. or M.D./Ph.D., Board Certification in gynecologic oncology, advanced laboratory research experience in cell-cell interaction and signal transduction pathways in cervical carcinoma and intraepithelial neoplasia, documented by publications in peer-reviewed journals, and expertise in clinical gynecologic oncology trials. Academic rank will be commensurate with experience. Applicants should send a curriculum vitae to: Dr. S. Faro, Chairman, Department of Obstetrics and Gynecology, 1653 West Congress Parkway, Chicago, IL 60612.

POSTDOCTORAL RESEARCH ASSOCIATE

Doctoral degree in: epidemiology, sports medicine, biostatistics, exercise physiology, human biology nutrition, genetic epidemiology or related field. Preferred: analytical background. Two positions: open until filled. Review begins June 1, 1997. Apply to: Postdoctoral Committee, Division of Human Biology, Wright State University, School of Medicine, 1005 Xenia Avenue, Yellow Springs, OH 45387. http://www.med. wright.edu/som/academic/divhum/divhum.html. FAX: 937-767-6922. Equal Opportunity Employer/Affinnative Action.

POSITIONS OPEN

UNIVERSITY OF CINCINNATI

POSTDOCTORAL FELLOW needed immediately to join laboratory engaged in studies of molecular genetics of thyroid cancer. Excellent experience offered in tumor genetics, signal transduction and aspects of cell biology. Contact: James A. Fagin, M.D., telephone: 513-558-4444, FAX: 513-558-8581, Email: faginja@uc.edu.

POSTDOCTORAL VACANCY XENOBIOTIC-INDUCIBLE TRANSCRIPTION OF CYTOCHROME P450 GENE

An Intramural Research Training Award (IRTA) position is available to study molecular mechanism of xenobiotic-inducible transcription of cytochrome P450 gene. Ph.D. with a strong background in molecular biology or related field desired. A putative phenobarbital-responsive enhancer element of the mouse Cyp2b10 gene is identified in the primary hepatocyte system. Purification of the nuclear factors which bind to the enhancer and a signal transduction pathway to regulate these factors will be studied. Experience with gene transcription and/or signal transduction and demonstrates competence in core molecular biology techniques will be essential. To be eligible, applicants may not possess more than five years of postdoctoral experience and must possess either U.S. citizenship or permanent residency. For additional information, contact: Dr. Masahiko Negishi at 919-541-2404, FAX 919-541-0696 or Email: negishi@niehs.nih.gov. To be considered, submit a cover letter, curriculum vitae, bibliography and the names of three references to: Dr. Masahiko Negishi, Maildrop E4-07, National Insti-tute of Environmental Health Sciences, Laboratory of Reproductive and Development Toxicology, P.O. Box 12233, Research Triangle Park, North Carolina 27709 by June 30, 1997. NIH is an Equal Opportunity Employer

POSTDOCTORAL POSITION IN HIV VACCINE RESEARCH

A POSTDOCTORAL position to study the expression of HIV-1 co-receptor genes is available immediately at the Henry M. Jackson Foundation Research Laboratory facility in Rockville, Maryland in the Department of Vaccine Research, Walter Reed Army Institute of Research (**Dr. Nelson Michael**). Candidates should hold either an M.D. and/or Ph.D. degrees and have extensive experience in molecular biology and virology. Expertise in transcriptional regulation and signal transduction is especially desired. Submit curriculum vitae and three letters of reference to: Human Resources Department, Attn: PL#4970152, The Henry M. Jackson Foundation for the Advancement of Military Medicine, 1401 Rockville Pike, Suite 600, Rockville, MD 20852. Email: hr@mail.hjf.org. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Chromatin Structure/Transcriptional Regulation. A POSTDOCTORAL position is available to study mechanisms regulating the beginning of gene expression during mouse embryonic development. Experience in protein biochemistry/molecular biology/developmental biology is preferred. Send curriculum vitae and letters of reference to: Sadhan Majumder, The University of Texas M.D. Anderson Cancer Center, Department of Neuro-Oncology, Box 316, 1515 Holcombe Boulevard, Houston, TX 77030. Telephone: 713-792-8920; FAX: 713-792-6054; Email: majumder@audumla.mdacc.tmc.edu. The University of Texas M.D. Anderson Cancer Center is an Equal Opportunity Employer. Women and minorities are encouraged to apply. Smoke free environment.

Two POSTDOCTORAL positions are available immediately in the Neural Development Section of the National Institute of Neurological Disorders and Stroke (NINDS) intramural program. The laboratory studies the development of peripheral synapses including transmitter choice and regulation of receptor and effector protein expression using both *in vivo* and *in vitro* model systems. While a variety of approaches are used in addressing these questions, candidates with biochemical or molecular biological expertise are strongly encouraged to apply for these positions. Please send a letter describing your interest and long term goals, a curriculum vitae and three letters of reference to: Story Landis, NINDS, Building 36, Room 5A05, NIH, Bethesda, MD 20892. NIH is an Equal Opportunity Employer.

UNIVERSITÄT LEIPZIG

University of Leipzig, Interdisciplinary Centre of Clinical Research

A position as

Head of a Research Group for Molecular Medicine

is available for 5 years.

The Interdisciplinary Centre of Clinical Research was founded in 1996 in order to investigate the "role of cell-cell- and cell-matrixinteractions for diagnostic and therapeutic strategies." The research group is to develop a clear cell-biological/molecular-biological profile and to study cell differentiation and cellular interactions. Several years of comprehensive experience and methodical knowledge on gene transfer techniques are required. Further, pronounced interest in clinical topics and new therapeutic strategies (e.g. gene therapy) as well as willingness to cooperate with clinical partners are desired.

Salary will be \$58,000 per annum according to la BAT-O. The group will comprise one more scientist, two Ph.D. students and one technical assistant, and will get investment funds as well as its own budget for material and reagents.

Applicants are invited to send a CV, publication list, 3 selected original publications, and 2 reference letters as well as a brief account on their present research profile not later than May 14th to

Universitätsklinikum Leipzig Geschäftsführer des IDZL, Dr. Noack Lieblgstraße 27, D-04103 Leipzig

For further information contact IDZL Management, tel. +49 341/9715940, fax +49 341/9715949.

INSTITUTE of CELL AND MOLECULAR BIOLOGY

LECTURER IN MICROBIAL BIOTECHNOLOGY

Applications are invited for the above post to be held within the Institute of Cell and Molecular Biology. Applicants should have a PhD and an established research record in this area. The individual appointed will be expected to establish an active externally funded research group in an area of microbiology of direct interest to industry. The successful candidate will contribute to undergraduate teaching in microbiology and other appropriate courses within the Edinburgh School of Biology.

The post is available from 1 October 1997 for an initial period of 5 years.

Salary on scale: £16,045 - £21,016 per annum or, exceptionally, £21,894 - £27,985 per annum.

Please quote REF: 796285/SC

Informal enquiries to Professor D J Finnegan, Head of Institute, Darwin Building, The King's Buildings, Tel: 0131 650 5361 or Fax: 0131 650 8650. Information about the Institute of Cell and Molecular Biology can be found on http://www.icmb.ed.ac.uk/.

Further particulars including details of the application procedure should be obtained from

THE PERSONNEL DEPARTMENT, THE UNIVERSITY OF EDINBURGH, 1 ROXBURGH STREET, EDINBURGH EH8 9TB TEL: 0131 650 2511 (24 hour answering service).

http://www.admin.ed.ac.uk/persnnel/recruit.htm

Closing date: 2 June 1997.

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The ideal candidate will direct a department that develops and designs a wide variety of high throughput assays using genetic, biochemical and cellular technology relevant to the current and planned screening program. You will provide strong biological assay development expertise with specific emphasis on kinetics and thermodynamics of coupled chemical systems and disseminate state of the art techniques. As a leader of the department, you will manage planning, budgeting and scheduling; make key decisions based on findings, and ensure compliance with technical and scientific requirements. Pragmatic and results driven you must be able to communicate effectively with colleagues from different disciplines.

The importance of this position requires approximately 5 years experience in drug discovery and screening, thorough understanding of signal transduction pathways and knowledge of assay development. You must possess a Ph.D. degree in Biochemistry or Physical (Bio)chemistry. Supervisory experience, a team player attitude, and good oral and written communication skills are essential.

EVOTEC offers an exciting scientific and professional environment and, in addition, competitive salaries and benefits. Our location in Hamburg offers an attractive and international lifestyle with easy access to all the cultural and recreational activities of the northern German seaboard.

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ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE Laboratory for Cellular Biotechnology

looking for

ASSISTANTSHIPS

Motivated Ph.D. students + Postdoctoral positions are available immediately at the Laboratory for Cellular Biotechnology at the Swiss Federal Institute of Technology of Lausanne, Switzerland. Supported by the Swiss National Fund, the training program focuses on industry relevant recombinant protein production, ranging from DNA transfer into mammalian cells to protein purification and characterization.

The candidates will have a background in biochemistry, biology, pharmacy, chemistry, or related fields. Strong communication skills are required in our interdisciplinary and international setting. Candidates should be fluent in written and oral English, German, or French.

Submit curriculum vitae with two letters of reference to

Service du personnel de l'EPFL, Pavillon C-Ecublens, 1015 Lausanne.

The U.S. Environmental Protection Agency (EPA) is seeking qualified applicants for the position of branch chief and two staff positions (one in lotic ecology and the other in landscape ecology) in the Watershed and Ecosystems Effects Research Branch (WEERB), Mid-Continent Ecology Division, National Health and Environmental Effects Research Laboratory. The Division conducts research on ecotoxicology and freshwater ecology in order to reduce the uncertainty in ecological risk assessments, and WEERB focuses on conducting research to understand and predict the effects of human activities on aquatic ecosystems and their surrounding watersheds.

The branch chief will provide scientific leadership for the branch; supervise approximately 30 ecologists, biologists, and chemists; and serve on the senior management team for the Division. This position may be filled as a Supervisory Research Biologist, GS-401-14; Supervisory Ecologist, GS-408-14; or Supervisory Research Fishery Biologist, GS-482-14. The salary range is \$63,169-\$82,120.

The incumbent of the lotic ecology position will serve on a research team seeking to understand how stressors affect aquatic ecosystem structure and function and to develop techniques that describe the ecological condition of these systems. The incumbent of the landscape ecology position will serve on a research team seeking to understand the linkages between watersheds and aquatic ecosystems, as well as the nature of cumulative impacts. These positions will be filled as a Research Biologist, GS-401-12/13; Ecologists, GS-408-12/13; or Research Fishery Biologist, GS-482-12/13. The salary range for the GS-12 is \$44,953-\$58,442, and the salary range for the GS-13 is \$53,456-\$69,492. The positions may be filled at either grade level depending on the individual's qualifications.

Current or former permanent, competitive service federal employees may apply through EPA by calling our automated jobline at **919-541-3014** and leaving a message requesting the vacancy announcement and application package. The vacancy numbers are EPA-RTP-97-96 for the branch chief position, EPA-RTP-97-63 for the lotic ecology position, and EPA-RTP-97-44 for the landscape ecology position. Applications must be received by June 3, 1997.

All other candidates MUST apply through the Office of Personnel Management (OPM) by calling the OPM automated jobline at **919-790-2822** or by accessing OPM via the Internet at **http://www.usajobs.opm.gov** and requesting the application package for AR0473 for the branch chief position, AR0385 for the lotic ecology position, and AR0383 for the landscape ecology position. Requests for application materials from OPM must be made no later than June 3, 1997.

EPA is an equal opportunity employer.

Director Board on Biology

The National Research Council is seeking a Director to develop and direct the scien tific, administrative and fiscal manage-ment responsibilities for the Board on Biology including its committees and staff; supervising and conducting ongoing and new studies; providing assistance to the Commission on Life Sciences (CLS) Executive Director in matters concerning biology and related areas; and performing other assigned duties. Requires a Ph.D. or equivalent, preferably in the biological sciences or one of the life science disciplines, plus at least 6 years directly related, increasingly responsible experience in an academic or government environment (preferably a combination of both). Requires familiarity with a wide range of areas from ecology to genetics and neu-roscience; and knowledge of biology and science policy and trends in emerging areas (biotechnology, genetics, etc.) Also requires excellent oral and written communication, planning and organizational skills, and the ability to develop new projects and secure new funds to support Board activities while simultaneously coordinating and supervising the completion of the ongoing projects. Please send

resume in confidence to: National Research Council, PG-BB (SCI), NAS 343, 2101 Constitution Avenue, Washington, D.C. 20418. EOE.



Incyte Pharmaceuticals, Inc., is a leader in the design, development and marketing of genomic database products, software tools and related services. Our database products integrate bioinformatics software with both proprietary and publicly available genetic information to create informationbased tools used by pharmaceutical and biotechnology companies in drug discovery and development.

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You will be responsible for creating and implementing a research program to study dysregulated facets of tumor cells using state of the art molecular and cell biological techniques, including microarray technologies. M.D./ Ph.D. required with 5 - 7 years of post-graduate training and good knowledge of pathology as it relates to cancer. Scientific areas of expertise may include cell cycle regulation, signal transduction, cell adhesion/cell structure, programmed cell death, DNA replication and repair, differentiation. Industry experience beneficial.

If you recognize these qualities in your self, we want to hear from you. Incyte offers competitive salaries, an outstanding benefits package and significant opportunities for professional growth. Mail or fax your resume to Incyte Pharmaceuticals, Attn: HR/REF:708; 3174 Porter Drive, Palo Alto, CA 94304; Fax (415) 855-0572. E-mail: employ@incyte.com. EOE. website:www.incyte.com

PHARMACEUTICALS. INC

Aurora Biosciences Corporation

Aurora Biosciences Corporation is a leader in the application of novel, cell-based fluorescence technologies and miniaturization for functional analysis and ultra-high-throughput screening. We are currently looking to recruit personnel to accelerate our Ion Channel Technology program:

1) Senior Scientist, Ion Channels - Cell Biology

The candidate should have a Ph.D. and 5+ years of postdoctoral experience, some in an industrial setting. Requires strong knowledge of biophysics and electrophysiology, pharmacology, and fluorescent techniques related to ion channel analysis in mammalian cells. Must have a proven ability to work independently and a record of peer-reviewed publications.

2) Senior Scientist, Ion Channels - Molecular Biology

The candidate should have a Ph.D. and 5+ years of postdoctoral experience, some in an industrial environment. Requires extensive expertise in the cloning and expression of cell surface receptors, especially in ion channels, in mammalian cells. Must have a proven ability to work independently and a record of peer-reviewed publications.

Aurora offers competitive salary and benefits. *EOE*. Send or fax resume/curriculum vitae to:

Human Resources Manager Aurora Biosciences Corporation 11149 North Torrey Pines Road La Jolla, CA 92037 (Fax: 619-452-5723) Opening for a Scientist/Educator Center for the Neural Basis of Cognition (CNBC) A Joint Center of Carnegie Mellon and the University of Pittsburgh

A Ph. D. Scientist/Educator with a background in COGNITIVE NEUROSCIENCE is sought to take a central role in formulation and development of an interactive planetarium show, TRACKING THE HUMAN BRAIN, funded by the National Science Foundation. The show will describe how cognition and perception arise from neural activity. The show will use the dome of the planetarium as a metaphor for the cerebral cortex of the brain, and will use a novel interactive technology to allow members of the audience to participate as neurons in the simulation of human cognitive and perceptual processes. The individual hired will be expected to work with a team comprising other CNBC scientists and artists at the Studio for Creative Inquiry at Carnegie Mellon University, and science museum professionals at the Carnegie Science Center in Pittsburgh, to ensure that the production, which is to be disseminated to science centers world-wide, communicates essential scientific content in a manner accessible to the general public. This is a two-year position, and employment would ideally begin as early as July 1, 1997, but excellent candidates who may not be available until 1998 are also encouraged to apply. Salary commensurate with experience. Send a resume detailing experience in research and science education relevant to the Neural Basis of Cognition and three letters of reference to J. L. McClelland, Co-Director, Center for the Neural Basis of Cognition, 115 Mellon Institute, 4400 Fifth Avenue, Pittsburgh, PA 15213-2683. Carnegie Mellon University is an Equal Opportunity / Affirmative Action Employer.

UNC/GLAXO WELLCOME FELLOWSHIP IN DRUG DEVELOPMENT

The School of Pharmacy at the University of North Carolina at Chapel Hill, in conjunction with Glaxo Wellcome Inc., is offering a two-year fellowship in drug development. The ideal candidate will have obtained a Ph.D., Pharm.D. or M.D. with advanced training in cell/molecular biology. Prior experience in cell culture and sterile techniques is preferable, but not required.

The fellowship seeks to provide:

- Training and education in targeted areas of drug development
- * Expertise in the general process of drug candidate selection through in vitro model systems
- * Experience in drug development activities relevant to the pharmaceutical industry and academia

During the first year of the fellowship, the fellow will participate in the development and optimization of in vitro conditions for evaluating drugs as modulators of cytochrome P450 enzymes in primary cultures of human hepatocytes. Optimization includes specific culture conditions for human hepatocytes, kinetics of cytochrome P450 expression and induction and dose response of cytochrome P450 modulators. The second year of experiential training will focus on evaluating specific drugs as modifiers of cytochrome P450 enzymes in the human hepatocyte model. This will entail validating in vitro/in vivo correlations for cytochrome P450 modulation and adapting the model system to high-throughput applications.

The fellowship will begin in the summer of 1997. Applications, consisting of a letter describing personal goals as they relate to the fellowship, a curriculum vitae and three professional references, must be submitted by **June 30th** to:

Edward L. LeCluyse, Ph.D. School of Pharmacy Beard Hall, CB# 7360 THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL Chapel Hill, NC 27599-7360

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GLOBAL CAREER OPPORTUNITIES

U NOVARTIS

The Department of Biotechnology, Development and Production, Bioanalytics, is looking for a

Cell Biologist / Biochemist

Areas of responsibility:

Head of a bioanalytical laboratory following GMP rules; development of quantitative biological assays (predominantly cell culture methods) for biotechnological products; adaptation, optimization and validation of analytical methods in collaboration with Research departments.

Qualifications:

Ph.D. in Biochemistry, Cell Biology or equivalent; several years experience in pharmaceutical industry mandatory (Quality Control, Research or Development); experience with cell cultures; development of quantitative bioassays and immunoassays necessary; knowledge of biometrical/statistical methods desired; excellent knowledge of English required, as well as some German or French.

Please send your application documents to:

Novartis Pharma AG Personnel Department Mr. S. Jäggi CH-4002 Basel/Switzerland



COLBY COLLEGE

to undergraduate education. Teaching assignments will include three courses with laboratories in the candidate's discipline including mammalian anatomy and physiology, and two other courses (e.g., animal behavior, vertebrate biology, marine biology). Familiarity with liberal arts colleges, teaching experience, and/or post-doctoral experience are desirable. Please submit a letter of application, statement of teaching interests (including courses you would like to teach at Colby) curriculum vitae, reprints of no more than three publications, undergraduate and graduate transcripts, and three letters of recommendation to: Paul G. Greenwood, Chair, Department of Biology, 5720 Mayflower Hill, Colby College, Waterville, Maine 04901. (207) 872-3322. E-mail: pggreenw@colby.edu.

Application review will begin immediately and continue until the position is filled. Colby College is an Affirmative Action/Equal Opportunity Employer, and encourages applications from minorities and women.



Pherin Corporation is a pharmaceutical development company that is actively developing products which act on the central nervous system and/ or neuroendocrine system.

We are seeking an outstanding scientist with at least four years of relevant postdoctoral experience to develop and implement strategies to isolate and characterize human neuroendocrine receptors, to study ligand/receptor interactions, and to assist the discovery of novel molecules that modulate receptor activity. This individual is expected to have extensive experience and demonstrated productivity in the area of molecular biology, particularly with methods related to the cloning and analysis of cDNA and genomic DNA, and to the study of receptor proteins. A strong background in experimental design and data interpretation is required, as are current knowledge of relevant scientific literature and emerging molecular biological techniques. The individual will be a member of a multi-disciplinary project team and is expected to work independently as well as to supervise other team members.

Job Qualifications

- · Ph.D. degree with relevant postdoctoral experience and proven productivity.
- Extensive experience with basic molecular biological techniques, cDNA cloning and analysis, genomics, and receptor isolation and characteriztion, as well as relevant computer skills and mammalian cell tissue culture experience.

This position will be at the Pherin-sponsored facility located at the University of Utah in Salt Lake City, Utah.

> Please send your resume to: Pherin Corporation

535 Middlefield Road, Suite 240 Menlo Park, CA 94025

email: drb@pherin.com

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Membrane Trafficking Group

Scientists will direct research to define key components in membrane trafficking and protein sorting involved in the translocation of glucose transporters in insulin-responsive cells.

Genomics Group

Scientists will direct research to identify genes that are related to insulin-responsiveness in tissues and undertake the functional assessment of those genes. Experience in differential expression analysis and/or high-throughput sequencing is desirable.

METABOLEX offers competitive salaries and benefits. More detailed information about research and scientists at Metabolex is available upon request. Applicants should send a curriculum vitae to: Metabolex Inc., Director of Human Resources, 3876 Bay Center Place, Hayward, CA 94545 or via email to science@metabolex.com. Metabolex is an equal opportunity employer.

UNIVERSITY of PENNSYLVANIA



Department of Pharmacology Full Professors

Tenure track faculty positions are available at Full Professor level, and include start-up funds. Applicants should have the experience to develop a strong, extramurally funded research program in one of the fields listed below.

- Cancer Pharmacology Reply to Dr. Ian A. Blair, Cancer Pharmacology Search Committee.
- Neuropharmacology Reply to Dr. James H. Eberwine, Neuropharmacology Search Committee.
- Vascular Biology Reply to Dr. Garret A. FitzGerald, Vascular Biology Search Committee.

Applications, including a curriculum vitae, selected reprints, or preprints, a statement of research interests, and the names and addresses of three references should be sent to the attention of the appropriate search committee listed above at:

Department of Pharmacology Medical School of the University of Pennsylvania

Philadelphia, PA 19104-6084

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

UNIVERSITY of PENNSYLVANIA



Department of Pharmacology Assistant/Associate Professors

Tenure track faculty positions are available at Assistant/Associate Professor levels, and include start-up funds. Applicants should have postdoctoral experience and the ability to develop a strong, extramurally funded research program in one of the fields listed below.

- Cancer Pharmacology Reply to Dr. Ian A. Blair, Cancer Pharmacology Search Committee.
- Neuropharmacology Reply to Dr. James H. Eberwine, Neuropharmacology Search Committee.
- Vascular Biology Reply to Dr. Garret A. FitzGerald, Vascular Biology Search Committee.

Applications, including a curriculum vitae, selected reprints, or preprints, a statement of research interests, and the names and addresses of three references should be sent to the attention of the appropriate search committee listed above at:

Department of Pharmacology Medical School of the University of Pennsylvania Philadelphia, PA 19104-6084

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

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Requirements: Ph.D. in electrophysiology, biophysics, or physiology. Experience with cellular electrophysiology, imaging and single-channel analysis desirable. Must possess excellent verbal communication and writing skills.

Please send resume to: Cliff Christian, Ph.D. MSA Dept.

Axon Instruments, Inc.

1101 Chess Drive, Foster City, CA 94404, USA Phone (415) 571-9400 Fax (415) 571-9500 e-mail: cliffc@axonet.com AA/EOE

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Neurogenomics

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Our research team focuses on the application of recent discoveries in human genetics to the development of novel therapeutics for Alzheimer's and other neurodegenerative diseases. We seek an individual with a strong background in the field of Alzheimer's disease or a related area who has broad appreciation for the impact of genomics on drug discovery efforts in the pharmaceutical industry. The ideal candidate will possess a Ph.D. in Molecular Biology, Biochemistry, or Genetics and will have 3-5 years relevant postdoctoral experience in either industry or academia. Demonstrated strong communication skills with potential for scientific leadership and the ability to function in a dynamic, interactive, interdisciplinary environment are highly desirable. Pharmacia & Upjohn offers a stimulating, multidisciplinary research environment in modern facilities at our Pharma Product Center in Kalamazoo. Our region offers an outstanding mix of cultural and recreational pursuits and an attractive cost of living. Competitive salary and benefit packages are provided.

For confidential consideration, please send your resume and a description of your research experience to:

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ADVANCE OUR METABOLIC

DISEASE PROGRAM

LIGAND Pharmaceuticals Inc., a leader in gene transcription technology, particularly Intracellular Receptor (IR) and Signal Transducer and Activators of Transcription (STATs) technology, is developing small molecule drugs for the treatment of human disease. We have recently described the insulin sensitizing effects of a new class of retinoids (*Nature, 386; 407-410*) and are seeking talented individuals to join us in our metabolic disease program.

RESEARCH SCIENTIST

You will identify and develop animal and cell-based models of NIDDM and obesity for use in the evaluation of lead compounds. The position requires a PhD and a minimum of 2 years' postdoctoral experience in metabolic disease research. You must have a broad knowledge of NIDDM and obesity, experience with *in vitro* and *in vivo* models of metabolic disease, excellent communication skills and proven interpersonal abilities to interface with a number of departments. Dept. 750-28

SENIOR RESEARCH ASSOCIATE

Use your skills to assist in studies evaluating pre-clinical compounds using *in vitro* and *in vivo* assays. You will be responsible for data collection, manipulation and graphing for presentation. You must have a BS/MS in Biology with at least *I* year of animal research experience. Experience with cell-based and biochemical assays as well as knowledge of anatomy and physiology highly desired. Dept. 750-29.

LIGAND, located in beautiful San Diego, offers an attractive salary and benefits package, including stock options. Please fax or mail your resume, referencing appropriate Dept., to: LIGAND Pharmaceuticals, Dept.____, 9393 Towne Centre Drive, San Diego, CA 92121. Fax: (619) 550-7800. EOE.



RESEARCH ASSISTANT POSITION DIVISIONS OF GASTROENTEROLOGY AND LABORATORY MEDICINE MAYO MEDICAL SCHOOL, CLINIC AND FOUNDATION Postdoctoral position available immediately to study exfoliated stool markers for colorectal neoplasia and to assist in assay development. Expertise in immunochemical technique and cell biology required. Please submit curriculum vitae and three letters of recommendation to: David A. Ahlquist, M.D.

David A. Ahlquist, M.D. Professor of Medicine Division of Gastroenterology Mayo Clinic 200 First Street SW Rochester, MN 55905 FAX: 507/266-0350

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



TOXICOLOGIST

Great Lakes Chemical Corporation, a global multi-billion dollar company, has an immediate opportunity in its Corporate Regulatory Affairs Department. Requirements for this position include a B.S. or M.S. degree in a biological, biochemical, toxicological, or pharmacological discipline with a minimum of two years of regulatory toxicology experience. Strong background in organic and analytical chemistry desired. Computer literacy with databases, spreadsheets, and word processing are necessary skills.

Candidate must have excellent verbal and written communication skills, be able to demonstrate knowledge of domestic and international regulations, and the ability to evaluate/interpret non-clinical toxicology studies to perform risk assessments.

Headquartered in West Lafayette, Indiana, an attractive university community, Great Lakes offers a significant professional challenge and an attractive compensation package. For immediate consideration, please submit a resume and salary history in confidence to:

> **Diane M. Foster Human Resources Generalist Great Lakes Chemical Corporation** One Great Lakes Blvd. West Lafayette, IN 47906

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MANAGER/ASSOCIATE DIRECTOR TRANSGENIC FACILITY

The University of Texas-Houston **Health Science Center** Institute of Molecular Medicine for the Prevention of Human Diseases



Applicants should have extensive research experience in embryonic stem cell (ES) culture, mouse developmental genetics, and blastocyst injection. Responsibilities involve management of a state of the art mouse transgenic facility and development of ES lines and novel technologies. A doctoral degree is desirable, but experienced highly motivated professionals with MS or BS degrees will be considered.

Please submit CV and three letters of recommendation to:

Dr. Rick A. Wetsel Institute of Molecular Medicine University of Texas-Houston Health Science Center 2121 W. Holcombe Blvd. Houston, Texas 77030

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POSTDOCTORAL/RESEARCH ASSOCIATE

An NIH-funded POSTDOCTORAL/RESEARCH ASSOCIATE position is available immediately for a highly motivated individual experienced in cell biology, immunology, or biochemistry. The successful candidate will participate as a member of a clinical and basic science research team studying pregnancy loss in humans. Areas under investigation focus on the differentiation of human placental trophoblast and include control of plasma membrane phospholipid distribution, invasion of maternal decidua, intercellular fusion and the alteration of these events by monoclonal and naturally occurring antibodies against phospholipids. Candidates must possess a Ph.D. in a relevant area, or equivalent degree at the time of hiring. Please send an application letter, curriculum vitae, recent reprints and three references to: Neal S. Rote, Ph.D., Professor and Chair, Microbiology and Immunology, Wright State University School of Medicine, Dayton, OH 45435. FAX: 937-775-2012; Email: nrote@sirius.wright.edu; Web site: http://www.med. wright.edu/som/academic/micro/micro6.html. Review of applications will begin May 15 and continue until a suitable candidate is hired. Wright State University is an Equal Opportunity/Affirmative Action Employer

GRADUATE AND POSTDOCTORAL TRAINING OPPORTUNITIES IN BIOLOGY OF TRANSGENIC PLANTS

Department of Energy/National Science Founda-tion/USDA-sponsored **FELLOWSHIPS** at North Carolina State University and Novartis Biotechnology Research are available for basic and applied research involving transgenic approaches to disease resistance and/or epigenetic phenomena influencing transgene expression and inheritance. Applicants will work within a 20-member group of faculty and industry scientists to develop new interdisciplinary projects. U.S. citizens or permanent residents may obtain information and/or application materials from: Jennifer Ballard, Department of Plant Pathology, Box 7616, North Carolina State University, Raleigh, NC 27695-7616. Tele-phone: 919-515-6985; FAX: 919-515-7716; Email: jennifer_ballard@ncsu.edu. Webpage: http:// www2.ncsu.edu/unity/lockers/project/plantpath/ Triagenc/triagenc.html. Review of applications is ongoing and will continue until positions are filled. North Carolina State University is an Equal Opportunity Employer.

POSTDOCTORAL position available. Incumbent will be working in the area of diabetes and metabolism. Studies include glucose regulation *in vivo* and glucose production in patients with diabetes. Opportunity to develop independent research in molecular aspects of glucose metabolism and insulin action. M.D. or Ph.D. with strong background in chemistry or biochemistry required. Experience with high performance liquid chromatography and mass spectrometry required. Experience with arteriovenous catheterization, tracer dilution technology and pancreatic clamp techniques preferred. Excellent computer skills preferred. Salary: S26,000. Send résumés to: Eugenio Cersosimo, M.D., Ph.D., Division of Endocrinology, HSC T15, SUNY at Stony Brook is an Affirmative Action/Equal Opportunity Employer and Educator.

POSTDOCTORAL POSITIONS AT HARVARD MEDICAL SCHOOL Hematopoietic Stem Cell Gene Regulation and Therapy

Two **POSTDOCTORAL** positions available immediately for Ph.D.s to investigate hematopoietic gene regulation, gene therapy applications using adeno associated virus (AAV) vectors, protein interactions and signaling. Extensive experience in transcription factor research, stem cell biology, AAV, and/or yeast two-hybrid screening required. FAX or mail curriculum vitae and three letters of reference to: Dr. Daniel G. Tenen, Harvard Institutes of Medicine, Room 954, 77 Avenue Louis Pasteur, Boston, MA 02115. FAX: 617-667-3299.

POSTDOCTORAL POSITION available after July 1, 1997 to construct a computational neural network model of multisensory integration in the superior colliculus. Background in collicular neurophysiology and computer programming experience required. Send curriculum vitae, summary of relevant experience, and three letters of reference to: Dr. Thomas J. Anastasio, University of Illinois, Beckman Institute, 405 North Mathews Avenue, Urbana, IL 61801; FAX: 217-244-5180; Email: tstasio@uiuc.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN MYCOBACTERIA RESEARCH

Two **POSTDOCTORAL** positions are available in the Mycobacteria Research Laboratories, Department of Microbiology, Colorado State University, to study: (a) the structure, function and biosynthesis of post-translationally modified proteins of *Mycobacterium tuberculosis*; (b) the biochemistry and genetics of cell wall synthesis of *M. tuberculosis*. Applicants should have a strong background in (a) protein purification and analysis; (b) metabolic studies and/or molecular genetics. The unit or adjacent departments contain modern facilities for protein purification and analysis, soles for large scale growth of *M. tuberculosis*. Salary is commensurate with education and experience. Deadline for applications is June 30, 1997. A curriculum vitae plus the names of three referees should be submitted to: Ms. Marilyn Hein, Department of Microbiology, Colorado State University, Fort Collins, CO 80523-1677.

Colorado State University is an Equal Employment Opportunity/Affirmative Action employer.

POSTDOCTORAL RESEARCH ASSOCIATE INSECT LDL-RECEPTOR HOMOLOGUE

Position available beginning June 1, 1997 for an NIHfunded five-year study of the molecular basis of ligand recognition by the mosquito vitellogenin receptor. Research includes structure/function analysis of the receptor's ligand-binding domain, aided by computer-modeling, and development of receptor-mediated gene transfer to mosquito oocytes. Research experience in molecular biology and biochemistry is required. Send curriculum vitae, list of publications, and names, addresses and telephone numbers of three professional references to: Dr. Alexander S. Raikhel, Professor, Program in Genetics and Dept. Entomology, S-136 Plant Biology Building, Michigan State University, East Lansing, MI 48824-1115, USA, Telephone: 517-353-7144; FAX: 517-353-3396; Email: araikhel@ibm.cl.msu.edu

YALE UNIVERSITY SCHOOL OF MEDICINE

Applicants are invited to apply for **POSTDOC-TORAL POSITIONS** in Developmental Neurobiology. Preference will be given to applicants with a background in immunology to investigate autoimmune disorders of the CNS, including the recently advanced molecular mimicry hypothesis for Tourette's syndrome and obsessive compulsive disorder. Necessary skills include previous experience with biochemistry, immunochemistry, and extensive work with antibodies. Send curriculum vitae, and the names and telephone numbers of three references to: Dr. Paul Lombroso, SHM I-270, 230 South Frontage Road, Yale University School of Medicine, New Haven, CT 06520, Telephone: 203-737-2224, Email: paul_lombroso@vale.edu.

POSTDOCTORAL POSITION GROWTH FACTOR SIGNAL TRANSDUCTION

POSTDOCTORAL RESEARCH FELLOW position available July 1, 1997 to study the mechanisms of PDGF-stimulated transcription of immediate-early genes (see MCB 12, 5288; MCB 15, 315; JBC 271, 17417). Projects involve gene cloning, DNA transfections, and RNA purification/quantitation. Candidates with a Ph.D. and/or M.D. should have a strong background in molecular and cellular biology. Send curriculum vitae, summary of research experience, and names/telephone numbers of three references to: **Rolf Freter**, **M.D.**, **Ph.D.**, **Columbia University**, **P&S Room 8-512**, 630 West 168th **Street**, **New York**, **NY 10032**. Columbia University takes Affirmative Action toward Equal Employment Opportunity.

POSTDOCTORAL RESEARCH POSITIONS

Artificial enzyme/catalytic antibody group seeks organic chemists for synthesis of transition state analogs, molecular biologists for mutagenesis of catalytic antibodies, and microbiologists for genetic selection to improve catalysis. Also molecular/cell biologists to investigate the biology of kidney development and of ion transport in epithelial cells. Salary commensurate with experience. Please send curriculum vitae and names of referees to: Mr. Sean Kelly, Columbia University Department of Medicine, Box 84, 630 West 168th Street, New York, NY 10032. Columbia University is an Alfinnative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION

A **POSTDOCTORAL** position in pharmacology is available. Candidates should have a Ph.D. in either biology, biochemistry, or pharmacology to join a research team to study new CNS receptor tracers for functional imaging with PET and SPECT. Major emphasis will be on using products of molecular biology to characterize new ligands. Experience in *in vitro* receptor binding assays, autoradiography, neuroanatomy and tissue culture will be helpful. Send résumé to: Dr. Hank F. Kung, Departments of Radiology and Pharmacology, University of Pennsylvania, 3700 Market Street, Room 305, Philadelphia, PA 19104. Email: kunghf@sunmac.spect.upenn.edu. *Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to investigate the molecular basis of avian germ cell segregation in the prestreak chick embryo. Candidates should have a Ph.D. in developmental biology with a strong background in molecular biology and excellent communication skills. Experience in cell culture, cryosectioning, *in situ* hybridization, immunohistochemistry required. Send curriculum vitae, three letters of reference and reprints to: Dr. J.N. Petitte, Box 7608, NC State University, Raleigh, NC 27695-7608. Email: j_petitte@ncsu.edu. An Equal Opportunity/Affinnative Action Employer.

SYMPOSIUM

MAMMALIAN CLONING: IMPLICATIONS FOR SCIENCE AND SOCIETY June 26-27, 1997 Washington, D.C.

An important SYMPOSIUM for members of industry and academia to assess the new technologies, delineate potential benefits and perils, and confront ethical and legal issues that will impact on future research and development. Co-chairs: W. French Anderson, M.D.; J. Graig Venter, Ph.D.; Arthur Caplan, Ph.D.; and Alexander M. Capron. For program and registration: Telephone: 800-5-Biocon; 914-834-3100; FAX: 914-834-4329; Email: cloning@liebertpub.com.

GLOBAL CAREER OPPORTUNITIES

The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for a **CHAIR IN CELL BIOLOGY**. We are seeking an outstanding scientist with an established record in research and teaching of molecular cell biology. Areas of interest include the signal transduction processes involved in the proliferation and differentiation of higher eucaryotic cells, but other fields will also be considered. Support is provided through excellent facilities and an active research environment. Participation in the teaching program in cell biology at all levels is expected.

Applicants should submit a detailed résumé and a list of publications to: **President of ETH Zurich, Prof. Dr. J. Nüesch, ETH Zentrum, CH-8092 Zurich**, no later than June 30, 1997. The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.



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 Europe
 C

 R&D Systems Europe Ltd.
 F

 4-10 The Quadrant, Barton Lane
 E

 Abingdon, OX14 3YS, UK.
 E

 Tel: +44 (0)1235 551100
 T

 Fax: +44 (0)1235 533420
 F

 info@rndsystems.co.uk
 iii

Germany R&D Systems GmbH Borsigstrasse 7 65205 Wiesbaden, Germany Tel: +49 06122 90980 Fax: +49 06122 909819 infogmb@rndsystems.co.uk Japan Funakoshi, Co., Ltd. 9-7, 2-Chome Hongo, Bunkyo-ku Tokyo 113, Japan Tel: 81-3 5684-1622 Fax: 81-3 5684-1633

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