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POSITIONS OPEN



CHAIR OF THE DEPARTMENT OF CELLULAR BIOLOGY AND ANATOMY MEDICAL COLLEGE OF GEORGIA

The Medical College of Georgia School of Medicine is conducting a search to fill the position of Chair of the Department of Cellular Biology and Anatomy. The School of Medicine, in existence since 1828, enjoys an excellent reputation for educating Physicians, compassionate patient care, and outstanding research in basic and clinical science. The Department of Cellular Biology and Anatomy offers a wide range of courses and is involved in the education of medical students, graduate students, and undergraduate students in the Allied Health Sciences. Faculty of the department are involved in diverse research programs and in collaborative projects with other departments and centers. The department currently has 23 fulltime faculty members, and an annual budget of nearly \$2.6 million.

Applicants must hold a Ph.D. or M.D. degree. They must show outstanding scholarly activity, extramurally funded research productivity, and an established reputation as an educator. Candidates with research interests in any aspect of anatomy, cell biology, and/or neuroscience will be considered. The school actively encourages collaborative research programs among faculty in different basic science and clinical departments, and the new Chair will have exceptional opportunities to develop such interdepartmental research.

Nominees/applicants must send an up-to-date curriculum vitae and the names of three references by October 15, 1998, to:

Frederick H. Leibach, Ph.D., Chairman Search Committee for Cellular Biology and Anatomy Chair Office of the Dean, School of Medicine Medical College of Georgia Augusta, GA 30912-4750

Women and underrepresented minorities are especially encouraged to apply.

ASSISTANT PROFESSOR turfgrass pathology. The University of Wisconsin is seeking applicants for a full-time, 12-month tenure-track faculty position at the Assistant Professor level. Qualifications include a Ph.D. in plant pathology or a closely related field, with experience in turfgrass research and management desirable. The appointee will develop an innovative research/extension program leading to economically and environmentally sound approaches to control turfgrass diseases; develop and maintain extramurally funded research and extension programs; direct graduate students; and participate in the education program of the Department. Send a curriculum vitae, course transcripts, a statement of research and extension interests, and at least three letters of recommendation to: W. R. Stevenson, Plant Pathology, Univer-sity of Wisconsin-Madison, 1630 Linden Drive, Mad-ison, WI 53706. Telephone: 608-262-6292 by September 1, 1998. The position is available January 1, 1999. Details: website: http://www.wisc.edu/plantpath/. The University of Wisconsin is an Equal Opportunity Employer, and encourages women and minorities to apply

The Department of Pharmacology and Toxicology at the Medical College of Virginia of Virginia Commonwealth University seeks applications for a non-tenuretrack **ASSISTANT PROFESSOR**. Primary responsibility will be to conduct immunotoxicological research on the ability of drugs and chemicals to suppress the immune system. Applicant will participate in and assist in directing the NIEHS-sponsored immunotoxicology research program. Must secure extramural research support in immunotoxicology and teach to graduate and professional students. Candidate must have a Ph.D. in pharmacology, toxicology, microbiology, or immunology and at least two years of related postdoctoral training in immunotoxicology is preferred. Send a curriculum vitae, statement of interests, and list of three references by August 31, 1998, to: **Dr. George Kunos (F6150), P.O. Box 980613, Richmond, VA 23298-0613.** Position description available. *VCU is an Equal Opportunity/Affinative Action Employer and encourages women, minorities, and persons with disability to apply.*

POSITIONS OPEN FACULTY POSITION

THE DEPARTMENT OF PATHOLOGY AND THE CELL ADHESION AND MATRIX RESEARCH CENTER The University of Alabama at Birmingham

The Department of Pathology and The Cell Adhesion and Matrix Research Center announce the reopening of the search for a full-time, tenure-track faculty member at the rank of ASSISTANT or ASSOCIATE PROFES-**SOR** in the Department of Pathology and invite applica-tions from qualified candidates. The successful candidate must hold a Ph.D. or M.D.-Ph.D. degrees and have postdoctoral experience with a record of publications in mainstream journals. He/she will be expected to establish an independent, extramurally funded research program and to participate in departmental and graduate education activities of the Molecular and Cellular Pathology Graduate Program and the Cell Adhesion and Matrix Research Center. Candidates with expertise in molecular mechanisms of cell adhesion are especially welcome to apply. A competitive salary, newly renovative laboratory space, and start-up package are available. University of Alabama at Birmingham is ranked in the top 20 institutions in NIH-funded research and offers a highly interactive environment with state-of-the-art facilities. Applicants should submit a current curriculum vitae with a statement of research interests, and three letters of reference to: Joanne E. Murphy-Ullrich, Ph.D., Chair, Search Committee, Department of Pathology, G038 Volker Hall, 1670 University Boulevard, Birmingham, AL 35294-0019. Applications must be received by September 1, 1998. UAB is an Affirmative Action/Equal Opportunity Employer. Women and minority applicants are encouraged to apply.

DIRECTOR, VASCULAR BIOLOGY UNIT

The Department of Medicine at Indiana University (IU) School of Medicine is seeking to fill an Endowed Chair for a Director of a new Vascular Biology Unit. The unit will have both basic research and clinical missions and function in a schoolwide interdisciplinary and interdepartmental fashion. The candidate, M.D. or Ph.D., must have a strong record of research accomplishment and experience in directing or participating in vascular biology program project-type efforts. In addition to his/her own research, the Director will be expected to facilitate the creation of new research, clinical, and educational programs, taking advantage of extant expertise in the IU School of Medicine. Tenure-track rank of Associate or Full Professor and salary will be commensurate with experience. Space, a physiology core for animal and human studies, tissue culture core facilities, additional faculty slots to recruit to, and Fellowship support are available for the Vascular Biology Unit. Please send curriculum vitae to: Alain Baron, M.D., Professor of Medicine, Director, Division of Endocrinology and Metabolism, In-diana University School of Medicine, 541 North Clinical Drive, CL 459, Indianapolis, IN 46202-5111. FAX: 317-278-0658; e-mail: abaron@iupui. edu. Indiana University is an Affirmative Action/Equal Oppor-tunity Educator and Contractor. Minorities/Females.

MIT PLANETARY SCIENCE FACULTY

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

ate and undergraduate levels is essential at MIT. Interested individuals should send curriculum vitae and names of three references to: Ron Prinn, Department Head, Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139-4307. MIT is an Equal Opportunity /Affirmative Action Employer. MIT is a nonsmoking environment. SmithKline Beecham Pharmaceuticals Announces The Eleventh In Its Series of **RESEARCH SYMPOSIA**



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Postdoctoral Researcher - Position available in Transcriptional Regulation. Function of histone acetylation by the adapter GCN5 in transcriptional activation. Studies include genetic and biochemical approaches both in S. cerevisiae and in humans, focusing on the mechanism and biological role of protein complexes containing GCN5. **Repty to Dr. Shelley L. Berger.**

Postdoctoral Researcher - Structural studies on viruses and on enzymes responsible for human genetic disease. EM and theoretical methods are being used with crystallography to tackle large assemblies such as human adenovirus. Training in protein crystallography is highly desirable. **Reply to Dr. Roger M. Burnett.**

Postdoctoral Researcher - Two positions focusing on the development of DNA vaccines to cancer and infectious diseases. Candidates must hold M.D. or Ph.D. in the Immunology or Virology fields, or be from related disciplines such as Pharmacology or Genetics. Projects include: DNA Vaccines to HPV-16 Associated Cancer, to study optimizing vaccines for the treatment of cervical cancer associated with HPV-16 infections; and DNA Vaccine Design and Development to develop optimized DNA vaccines in a viral mouse model. **Reply to Dr. Hildegund Ertl.**

Postdoctoral Researcher - Conduct molecular virology studies of herpes simplex virus latency utilizing a mouse model system. We are also studying the use of HSV in gene therapy and cancer therapy. **Reply to Dr. Nigel Fraser.**

Postdoctoral Researcher - Postdoctoral researcher to elucidate a novel ATM-dependent DNA damage signaling pathway that activates p53 (Nature Genetics 19:175, 1998), including characterizing novel genes that form part of this pathway. **Reply to Dr. Thanos Halazonetis.**

Postdoctoral Researcher - Position available for postdoctoral fellow with experience in molecular biology to clone cancer T-cell antigens. Experience in constructing mammalian libraries required. **Repty to Dr. Dorothee Hertyn.**

Postdoctoral Researcher - Postdoctoral fellow wanted to work on animal model of cancer vaccines. Extensive experience in immunology and molecular biology required. Reply to Dr. Dorothee Herlyn.

Postdoctoral Researcher - Postdoctoral position to investigate at a cell and molecular level the concept of control by protein segregation using several DNA viruses as probes. Also immediate early interaction of viruses and host nucleus with the goal to interrupt transcription at the virus deposition site in the nucleus (see J. Cell. Biol. 134:815-825, 1996; J. Cell. Biol. 138:5-16, 1997). Good background in molecular techniques essential. **Reply to Dr. Gerd Maul**.

Postdoctoral Researcher - Two positions available to study the role of the Bin 1 tumor suppressor gene and related genes in apoptosis, cell cycle regulation, and cell differentiation. References: Nature Genet. 14, 69-77 (1996); Cancer Res. 57, 3258-3263 (1997); Oncogene 15, 887-898 (1997); Mol. Cell. Biol. 18, 566-575 (1998). A third position is also available to study the role of Rho functions in the mechanism of action of farmesyltransferase inhibitors (FTIs), a novel class of cancer chemotherapeutics currently in Phase I trials. References: Mol. Cell. Biol. 15, 6613-6622 (1995); Cancer Res. 57, 708-713 (1997); J. Biol. Chem. 272, 15591-15594 (1997). Experience in molecular and cellular biology is required; experience with transgenic animals is desirable. **Reply to Dr. George Prendergast.**

Postdoctoral Researcher - Research regarding human MHC non-restricted effector cells. Expertise in Immunology/Molecular Biology or Imunnochemistry required. Candidate must have tissue culture skills to handle various cell types, especially human lymphocytes; in addition, knowledge of basic immunological techniques is required. Successful candidate will have expertise in 1.) Genetic engineering of human cytoxic T-cells to increase their tumorcidal activity and/or homing to tumor sites 2.) Identification of tumor target receptors and effector molecules, and/or 3.) Role of glycoproteins as target for NK and T-cells. **Reply to Dr. Daniela Santoli.**

Postdoctoral Researcher - Biochemical and molecular characterization of the RNA polymerase II complexes in human cells by using a fully defined in vitro transcription system. We are also characterizing the connection of the transcription machinery to that of DNA repair, with specific emphasis on the BRCA 1 and BRCA 2 proteins. Nature 374:283, (1995); and Nature 381:86 (1996). Motivated scientists with Ph.D. in any discipline of biological sciences and with experience in molecular biological techniques and protein purification preferred. **Reply to Dr. Ramin Shiekhattar.**

Interested applicants are requested to send a C.V. and three letters of reference to the Human Resources Dept., Attn: (appropriate faculty member), THE WISTAR INSTITUTE, 3601 Spruce Street, Philadelphia, PA 19104. EOE/AA/M/F/D/V.



Temporary Scientist

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We are seeking individuals with a BS/MS and background in biochemistry, bio-organic chemistry or organic chemistry and demonstrated skills in molecular biological approaches for elucidation of ligands for target proteins. The ability to plan and execute multiple tasks as well as to apply and adapt new techniques to research is a must. Research experience in a pharmaceutical environment is preferred.

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RESEARCH SCIENTIST

This position involves performing experiments and analytical methods using state-of-the-art molecular biology techniques. Applicants must have 1-5 years of biotechnology experience and a BS or MS in life sciences or engineering with life sciences emphasis. Hands-on experience with recombinant DNA technology is required. Experience with fermentation and/or PCR is preferred. Job #R9798-001.

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Dr. Robert Hodges CEO & Scientific Director PENCE Inc. 750 Heritage Medical Research Centre University of Alberta Edmonton, Alberta T6G 2S2 Phone: (403) 492-8851 Fax: (403) 492-6995 Website: http://www.pence. ualberta.ca

Deadline for receipt of applications is July 15, 1998.

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Director

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For further information contact Ms Anne M. Stinson, Secretary to the Selection Committee, telephone: (61 2) 6249 4739; Facsimile: (61 2) 6249 5011; Email: Anne.Stinson@anu.edu.au Further particulars including selection criteria must be obtained before applying from the Staffing Recruitment Officer, telephone: (61 2) 6249 5903; facsimile (61 2) 6249 5011 or email academic.staffing.appointments@anu.edu.au Applications to the Staffing Recruitment Officer, The ANU, Canberra ACT 0200, quoting reference number JC 4.6.1, including CV, list of publications and the names and addresses of three referees. Closing date 15 August 1998.

PROFESSOR OF BIOCHEMISTRY & MOLECULAR BIOLOGY AND EMINENT SCHOLAR OF BIOTECHNOLOGY

The University of Georgia invites nominations and applications for a senior opening at the level of Professor and Eminent Scholar. Applicants are expected to have expertise and creativity in biochemistry/ molecular biology/microbiology/enzymology and an interest in the development of biotechnology-based techniques to used in particular by the pulp and paper industry. A demonstrated capability to cooperate with the private sector will be favorably considered. Applicants will be considered as received with the first major review on August 20, 1998; those applications received by that date are assured of consideration. To apply, send a letter describing research goals and accomplishments, CV, and the names and addresses of four references to:

Dr. Claiborne Glover, Search Committee Chair Department of Biochemistry & Molecular Biology The University of Georgia Athens, GA 30602-7229. An AA/EEO Institution.

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An academic appointment at a major local university and medical center engaged in leading research in these areas is possible, given the right credentials. We offer a highly competitive salary and equity compensation package. This is an outstanding opportunity for a talented scientist.

Interested candidates should send or e-mail their CV along with the names of three references to:

Daniel Goodman, M.D., M.B.A., The Falconwood Corporation, 565 Fifth Avenue, 3rd Floor New York, NY 10017 e-mail: dgoodman@interport.net

PROLINX

Prolinx is a small, chemistry-driven biotechnology company working on proprietary platforms with nucleic acidbased applications in life science research, genomics, and diagnostics. Prolinx seeks individuals who are self-motivated, well organized, and possess strong communication skills.

Prolinx invites applications for the following position: Synthetic Organic Chemist (Ref #RD6):

This individual will be part of a multi-disciplinary team working on one of the Company's proprietary chemistry platforms. He/she will be responsible for preparing polymeric DNA binding compounds as well as the monomeric starting materials from which the polymers are assembled.

Requires:

- Ph.D. in Synthetic Organic Chemistry or related field and 2+ years postdoctoral or industrial experience, or MS in Synthetic Organic Chemistry and 4-5 years industrial experience;
- Demonstrated expertise in modern peptide synthesis techniques, both manual and automated;
- Demonstrated expertise in the synthesis of protected amino acids and derivatives.

Prolinx offers a competitive compensation and benefits package, including 401(k), company stock option plans and relocation assistance. For consideration, please send cover-letter and resume, indicating appropriate Ref#. Prolinx requests that e-mailed resumes be virus-scanned Microsoft Word, Wordperfect for Windows, or RTF (rich text format) files.

HUMAN RESOURCES PROLINX, INC. 22322 20TH AVE. SE. BOTHELL, WA 98021 (E) HR@PLINX.COM EQUAL OPPORTUNITY EMPLOYER

SCIENTIFIC DIRECTOR NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

THE POSITION: Scientific Director of the Intramural Research Program, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). The NIAMS Intramural Research Program conducts clinical and laboratory research related to arthritis, musculoskeletal and skin diseases and also conducts basic research in biochemistry, immunology, pathology, histochemistry, chemistry, molecular biology, structural biology, and pharmacology. The Scientific Director serves as the principal advisor to the Director of the NIAMS concerning all ongoing and projected intramural research programs of the NIAMS and is fully responsible for the development of broad decisions concerning program planning, budget and policy formulation, and research allocation of the intramural program. The Scientific Director represents the NIAMS in discussions of NIH-wide intramural policies and programs, and serves as a vital member of the senior staff of the Institute. In addition to the managerial/ administrative responsibilities outlined above, the Scientific Director will carry out her/his own research program. Resources commensurate with the proposed program will be provided.

THE CHALLENGE: To provide strong and effective leadership in the overall scientific management of an innovative basic and clinical research program in the field of arthritis and musculoskeletal and skin disease with a budget of \$23 million and a staff of 180. The NIAMS is currently pursuing cutting-edge research on a broad spectrum of investigations, from fundamental analyses of protein structure and function by physical, genetic, and biochemical means to research on the etiology, pathogenesis, and treatment of selected rheumatologic and skin diseases.

THE IDEAL CANDIDATE: Will have demonstrated scientific leadership and research experience in both a basic and clinical research program of national and international standing in an area relevant to arthritis, musculoskeletal and skin diseases. Applicants must have a M.D. and/or Ph.D. degree.

SALARY: The Scientific Director will be appointed in the Senior Biomedical Research Service (salary up to \$151,800) or, if medically qualified, as a Title 38 employee with a salary depending on the candidate's experience.

HOW TO APPLY: An application accompanied by a current curriculum vitae and bibliography should be submitted to: Dr. Allen M. Spiegel, Chair, Search Committee, c/o The National Institute of Arthritis and Musculoskeletal and Skin Diseases, Attn: NIAMS Personnel Office, Building 31, Room 4C13, 31 Center Drive MSC 2350, Bethesda, MD 20892-2350. For further information please call Ms. Kathleen Phelan at (301) 496-0436 or visit our website at www.nih.gov/niams/.

NIH is an Equal Opportunity Employer

APPLICATIONS SHOULD BE POSTMARKED BY AUGUST 31, 1998, AND RECEIVED BY CLOSE OF BUSINESS SEPTEMBER 4, 1998.



By merging pharmaceutical science with information technology, Eli Lilly and Company is creating unprecedented opportunities to better meet the global population's health care needs. And achieving all this is a dedicated team of professionals. Their talents and skills in a variety of arenas keep our \$8+ billion company on the cutting edge.

Medical Science Writer

Eli Lilly and Company is seeking medical writing candidates for therapeutic area publications teams. Primary responsibilities include working on-site with multiple project teams to plan publication strategies; write, edit, and review scientific nanuscripts, abstracts, book chapters, and poster presentations; and contract eview and approval processes. Qualified candidates will have an educationate background in science, preferably in oncology, reproductive biology, endocrinology, or bone; excellent teamwork, leadership, and self-management skills; strong written and oral communication skills; and experience planning and writing scientific publications in prefered. We offer a competitive salary and excellent benefits, including tuition reimbursement.

Interested qualified condidates should send a cover letter, a resume, and at least three writing samples to: David Finnell, Dept: ADSCMMW06, U.S. Recruiting and Staffing, Lilly Corporate Center, DC 1811, Indianapolis, IN 46285.



We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace.

For other job opportunities, please access our Job Bank at http://www.lilly.com. or phone our Jobline 1-800-892-9121.

Animal Health Vaccine Development Associate Scientists

Bacteriologist, Virologist, Immunologist

Pfizer Central Research is actively recruiting premier talent for the Biologics Development Group. These positions provide an enriching environment which fosters scientific exploration in a collegial setting. Within our state-of-the-art facilities, Pfizer provides you access to a world of, resources...ideas, technology and people. Our goal is to develop novel vaccines utilizing the most advanced technology available to combat the pathogens of the next millennium.

We are seeking highly motivated, personable individuals with BS/MS in biology, biochemistry, or biotechnology. The successful scientist must demonstrate the capability of applying exciting new technologies to the assessment of both vaccine composition, and the immune response

in born vaccine composition, and the immune response in host animals. Also, the successful candidate will assist in the preparation of bioanalytical components of clinical protocols and regulatory filings. A working knowledge of the following techniques is highly desirable; cell culture, bacterial culture,

medium optimization, ELISA, PCR, FA assays SDS-PAGE, and immunoblot. GLP experience is useful, but not a requirement for placement.

Located in historic Groton, CT, Pfizer offers you a high quality of life close to New York City, Providence and Boston. We also offer very competitive solaries and excellent benefits, including medical/dental coverage, on-site advanced degree programs, 100% tution reimbursement and generous relocation assistance. For confidentia

and generous relocation assistance. For confidential and generous relocation assistance. For confidential consideration, please forward your resume to: Employee Resources, Pfizer Inc, Job Code #2718, Central Research Division, Eastern Point Road, Groton, CT 06340. For more information on current career opportunities, please visit our Web site at:

http://www.pfizer.com. We are an equal opportunity employer dedicated to diversity M/F/D/V.



We're part of the cure.

National Institute for Discovery Science

ESSAY COMPETITION

- The National Institute for Discovery Science Essay Competition is intended to stimulate thoughtful commentary on research questions surrounding the search for extraterrestrial intelligence.
- Scientists are invited to submit essays on the topic detailed on the NIDS homepage: www.accessnv.com/nids.
- Three prizes of \$5,000 each will be awarded to the authors of the highest quality essays as judged by an independent panel of seven judges.
- The deadline for submission of these essays is: August 11, 1998.
- Results will be announced on our website on: September 11, 1998.
- For writers' guidelines, essay topics, and the latest information on essay submissions to NIDS check our website at: www.accessnv.com/nids.
- The National Institute for Discovery Science, 1515 E. Tropicana, Ste 400, Las Vegas, NV 89119. Tel: 702-798-1700. E-mail: nids@anv.net.

Director, Neuropsychiatric Research Institute The University of Massachusetts Medical School

The University of Massachusetts Medical School (UMMS) announces the creation of a major new research institute dedicated to basic science research on major mental illness. Applications are invited for the joint position of Founding Director, Brudnick Neuropsychiatric Research Institute and Professor in the Department of Psychiatry The soon-to-be completed Institute, a collaborative effort of UMMS and the Massachusetts Department of Mental Health, is a new state-of-theart building consisting of 25,000 square feet of laboratory space and additional office and conference facilities. The position requires an individual who is an accomplished basic scientist with the ability to bridge the areas of clinical and basic neuroscience research. The position requires an individual with a demonstrated commitment to research and leadership skills in research administration and medical education. Excellent opportunities for collaboration with basic and clinical departments are available and the Director will play a major role in the continuing growth of basic and clinical neuroscience at UMMS. Opportunities for joint appointments with basic science departments are available. Salary and fringe benefits are competitive and the Medical School will provide a recruitment package designed to facilitate the development of an outstanding research institute

Those interested in applying for the position should send their complete CV to: Dr. Anthony J. Rothschild, M.D., Irving S. and Betty Brudnick, Professors of Psychiatry, University of Massachusetts School of Medicine, Room S7-802, 55 Lake Avenue North, Worcester, MA 01655. Nominations consisting of name, telephone number and address should be sent to



Dr. Rothschild. Review of applications will begin upon their receipt. The University of Massachusetts

The University of Massachusetts Medical School is an equal opportunity/affirmative action institution.

Vice President Research and Clinical Operations

AltaRex Corp. is an emerg-Ing biotechnology company responsible for Research and Clinical

focused on research, development and the commercialization of immunotherapeutics for the treatment of cancer. The Company's products are based on its unique proprietary platform technology, Anti-idiotype Induction Therapy (AIT"), which enhances the ability of the human immune system to produce a highly effective anti-tumor response. AltaRex is developing AIT" products for ovarian, breast, colorectal and prostate cancers. The Company also believes that its AIT" technology could also be effective for lung, stomach and pancreatic cancers. The Company is currently in a Phase IIb North American trial for its OvaRex" product and expects to file an IND for its BrevaRex" product in the second half

of this year. For more

information, please visit our

website at www.altarex.com.

responsible for Research and Clinical Operations. Responsibilities include:

•Directing research activities through the Director of Research located in Edmonton, Canada;

 Directing activities relating to the design and development of pharmaceutical products as conducted by a monoclonal antibody company;

•Directing planning, execution and interpretation of clinical trials/research and data collection activities;

•Directing overall corporate collaborations at the scientific and medical level;

•Presentation of the Company to the financial community.

Requirements include a M.D. and/or Ph.D. with a clinical or pharmaceutical background and extensive experience in interpretation of clinical trials/research and data collection activities. Knowledge relating to monoclonal antibodies would be an asset. Demands a high level of interaction both within and outside the Company. Frequent travel is required, including monthly trips to Edmonton, Alberta, Canada.

We offer a highly competitive compensation and benefits package. Interested candidates should submit a detailed resume by mail or fax to:

Human Resources, AltaRex, Corp. 303 Wyman Street Waltham, MA 02154 Fax number: 781-672-0142

ALTAREX



Virginia Commonwealth Liniversity

Post-doctoral Positions in Radiation Oncology, Signal Transduction, and Gene Therapy

A unique opportunity exists for outstanding candidates to investigate the molecular mechanisms of signal transduction, cell proliferation and apoptosis underlying tumor radioresistance, and to apply novel approaches to radiation treatment using drugs and gene

therapeutic tools. This highly interactive, multi-disciplinary program is supported by a P01 grant from the National Cancer Institute.

Rupert Schmidt-Ullrich, M.D. - Genetic Manipulation of EGFR Expression and Radiosensitivity of Human Carcinoma Cells

Kristoffer Valerie, Ph.D. - Genetic Manipulation of Tumor Radioresistance

William Broaddus, M.D., Ph.D. - Radiosensitization of Malignant Gliomas by Viral Transduction with Wild-Type p53

Steven Grant, M.D. - Gene Regulation of Ionizing Radiation-Induced Apoptosis

Please mail, FAX or e-mail your CV, a brief statement of current research, and names and telephone numbers of three references to: Kristoffer Valerie, Ph.D., Department of Radiation Oncology, Medical College of Virginia of Virginia Commonwealth University, Richmond, VA 23298-0058, FAX: 804 828-6042 e-mail: KVALERIE@GEMS.VCU.EDU Web-site:http://views.vcu.edu/mcvro/

VCU is an affirmative action, equal opportunity employer.

STAFF OFFICER BOARD ON BIOLOGY

Research

The National Research Council's Board on Biology is seeking a staff officer to develop, direct and provide intellectual oversight for new studies related to agricultural genome and training biologists for the postgenomic era. Responsibilities include: interacting with potential sponsors and preparing proposals for project support, appointment of committees, coordinating, planning and preparing for committee meetings, developing scientific data; writing scientific material for committee reports and overseeing the preparation of final reports and handling all related administrative and budgetary matters.

Candidates should have a Ph.D. or equivalent and at least 1 year of professional experience in molecular or cell biology; some experience in biotechnology and genomics is preferred. Other requirements include: ability to analyze, integrate and select data for use by committees, effective written and verbal communication and strong organizational and administrative skills for handling multiple scientific projects.

For consideration, please send curriculum vitae and

recent publication or writing sample in confidence to: Commission on Life Sciences, NAS 343 (PG), National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418. Visit us at: www.nas.edu EOE.



the University of Southern California

Postdoctoral Fellowships in Marine and Environmental Science

The USC Wrigley Institute for Environmental Studies invites applications for two Postdoctoral Fellowships. Each Postdoctoral Fellow will be paired with a faculty mentor from the appropriate department at USC. Preference will be given to candidates who can conduct research on Catalina Island in the areas of 1) ecology and physiology of marine plankton and/or benthos; 2) marine biogeochemistry; and 3) environmental guality and ecology of Catalina Island. These fellowships include salary (\$35,000 per year), modest research support and some teaching opportunities. The positions are initially granted for one year with opportunity for renewal for a second year. Applications are due August 15, 1998. Please send a letter of application, curriculum vitae, a statement of research interests, and arrange for three letters of recommendation to be sent to:

Dr. Donal T. Manahan Chair, WIES Postdoctoral Fellowship Committee Wrigley Institute for Environmental Studies Allan Hancock Foundation Building University of Southern California Los Angeles, CA 90089-0371

Fax: (213) 740-8123; email: manahan@usc.edu

The Science of Agricultural Genetics

RESEARCH ASSOCIATE (Job #CP-819S) Crop Protection-Insect Resistance

An individual is needed to play an integral part in the development of insect-resistant transgenic plants. This individual will interact with a group of scientists working across the entire range of this exciting and challenging field of research, from discovery and characterization of insecticidal proteins, and elucidation of their mode of action, to expression of those proteins in transgenic plants. A B.S. or M.S. degree plus two or more years of relevant experience is required. We currently have a need for a scientist with experience in engineering and characterizing proteins. A high level of competence with routine procedures in molecular biology and protein biochemistry is required, including cloning, protein gel electrophoresis, and western blot analysis. Candidates will preferably have experience with protein-protein interactions, ligand binding, or phage display techniques. Familiarity with interactions between plants and their insect pests, though not required, would be a plus. Good communication skills and the ability to interact well with other researchers are a must. Input on other researchers' intersecting projects will be expected. The successful candidate will have the opportunity to remain current on new technology and developments in the field by participating in professional meetings and career development activities.

RESEARCH ASSOCIATE (Job #CP-807S) Crop Protection - Insect Resistance

An individual is needed to play an integral part in the development of insect resistant transgenic plants. This scientist will function as an integral part of a group with a broad range of responsibilities, ranging from discovery and characterization of insecticidal principles to expression of these principles in transgenic plants. An M.S. with two years of experience or a B.S. with four years experience in the area of molecular biology is required. We currently have a need for scientists with experience in cloning, designing and characterizing proteins. A high level of competence with routine procedures of molecular biology, especially cloning and characterizing genes, is a must. The successful candidate will preferably have experience with insecticidal proteins, insect cell culture, microbiology, or insect resistant transgenic crops. Familiarity with techniques of cosmid cloning or phage display is preferred. Familiarity with corn and its associated insect pests is desired. Participation in other facets of research to develop insect resistant transgenic crops is expected. This includes expression of foreign genes in plants and characterization of the mode of action of insecticidal proteins. This position requires the ability to interact with other researchers. Good communication skills are a must.

Located in Johnston, Iowa, Pioneer offers a superb working environment, a competitive salary, and an excellent company benefit package. For confidential consideration send 3 copies of your cover letter and current resume, indicating job number: Pioneer Hi-Bred International, Inc., Attn: Human Resources-Research P.O. Box 1004, Johnston, IA 50131-1004; or e-mail jobsresearch@phibred.com. Visit our website at http://www.pioneer.com. Application deadline: July 24, 1998

. Pioneer Hi-Bred International, Inc., is the world leader in agricultural genetics. Founded in 1926, we are a publicly held company that invests more than \$160 million in research and product development. Pioneer[®] brand products are grown in almost every cropproducing continent in the world. At our headquarters in Des Moines, Iowa, we're adding to our Research team.

PIONEER HI-BRED



TENURE-TRACK POSITION IN TOXICOLOGY

The Department of Pharmacology at The University of Toledo College of Pharmacy invites applications for a twelve-month tenure-track position in toxicokinetics and risk assessment at the rank of **ASSISTANT PROFES-SOR** of pharmacology. A doctorate (Ph.D.) in either pharmacokinetics, toxicokinetics, chemical engineering, or a related field is required. At least two years of postdoctoral experience with specialization in mathematical modeling of chemical transport phenomena in biological systems and experience with physiologically based pharmacokinetic modeling is required. A strong background in statistics and interest or experience in applying physiologically based pharmacokinetic modeling to risk assessment is also desirable.

Primary responsibilities will include undergraduate and graduate instruction, research, and supervision of the bioanalytical laboratory of the Center for Applied Pharmacology and the Center for Drug Design and Development

It is expected that the successful candidate will develop an independent and funded research program in physiologically based pharmacokinetic modeling as it pertains to risk assessment. Collaborative research with Toxicologists and Epidemiologists is encouraged.

The position is available on August 17, 1998. Applications will be received by August 17, 1998, or until the position is filled. Those interested should send a current curriculum vitae and the names of at least three references to:

Dr. Kenneth Bachmann, Professor and Chair Department of Pharmacology The University of Toledo College of Pharmacy 2801 West Bancroft Street Toledo, OH 43606 Telephone: 419-530-1910 FAX: 419-530-1909 E-mail: kbachma@utnet.utoledo.edu The University of Toledo is an Eaual Access/Equal Opportu-

nity/Affirmative Action Employer and Educator.

ASSISTANT/ASSOCIATE PROFESSOR PATHOGENIC BACTERIOLOGY

The Department of Microbiology and Immunology at the East Carolina University School of Medicine invites applications for a tenure-track faculty position at the Assistant Professor or Associate Professor level. An individual utilizing modern molecular approaches in the general area of bacterial pathogenesis related to human health and disease is sought. Major responsibilities will include establishment and direction of an independent research program and participation in teaching of medical and gradu-ate courses. Salary and rank will be commensurate with qualifications. Appointment at the Associate Professor level requires a strong record of continuous research funding including current extramural support and evidence of leadership in teaching and service. The Department has 14 full-time faculty, an active doctoral studies program, and is fully equipped with advanced facilities for bacteriology, molecular biology, genetics, virology, im-munology, and animal research. Applicants should provide curriculum vitae, a letter describing research and teaching goals, and names and complete addresses of three references by mail to: Bacteriology Search Committee, Department of Microbiology and Immunology, School of Medicine, East Carolina University, Greenville, NC 27858-4354.

East Carolina University is an Equal Opportunity/Affirmative Action University. Accommodates individuals with disability. Applicants must comply with the Immigration Reform and Control Act.

RESEARCH ASSISTANT PROFESSOR

The Department of Medicine, Division of Hematology-Oncology, is recruiting a Research Assistant Professor of medicine. Qualifications: Ph.D. or equivalent degree with experience in molecular biology of transcription and its application to clinical problems in cancer therapeutics. The successful candidate will be responsible for the conduct of research in the transcriptional basis of drug resistance and in the mechanism of agents directed to the treatment and prevention of cancer. A strong commitment to teaching and advising graduate and undergraduate students is important. Applicants should submit an introductory letter and a curriculum vitae to: Dr. Peter J. O'Dwyer, c/o Diane Meredith, Hematology-Oncology Division, 510 Maloney Building, 36th and Spruce Streets, Philadelphia, PA 19104-4283. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS IN MOLECULAR MICROBIOLOGY

The Department of Biochemistry and Molecular Biology announces the establishment of a Section of Molecular Microbiology. Applications for tenure-track PRO-FESSORSHIPS at all ranks are invited. Candidates with expertise in all areas of microbiology will be considered. A research focus in molecular mechanisms of microbial pathogenesis, emerging pathogens, host-parasite interac-tions, or prokaryotic molecular genetics is desirable. Senior candidates should have an established reputation in prokaryotic research and a sustained record of external funding. The successful candidates will join a highly interactive faculty with well-recognized research programs. These individuals will have the opportunity and resources to define the direction of a new section that will become the nucleus for molecular microbiology at the Medical College. The department interacts with a strong immunology and genetics group on campus and enjoys excellent core facilities. Applicants will be expected to maintain an externally funded research program as well as participate in graduate teaching and in a team-taught microbiology course for medical students. Applicants should send curriculum vitae, summary of research accomplishments, description of future plans, and the names of three references to: Dr. F. H. Leibach, Chairman, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100. The Medical College of Georgia is committed to diversity in its faculty and students. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR FLORICULTURE BREEDING AND GENETICS UNIVERSITY OF MINNESOTA, ST. PAUL

Applications are invited for a 12-month, tenure-track Assistant Professor position in floriculture breeding and genetics. Research on the genetic improvement of floricultural crops with potential importance in Minnesota. Research areas could include development of new crop species, novel uses or forms of traditional crops, or genetic improvement of species to improve sustainability of production systems, such as resistance to biotic or abiotic stresses. Teaching in floriculture and related areas and advising of undergraduate and graduate students. Minima: Ph.D. or equivalent in plant breeding, horticulture, or related discipline with demonstrated expertise in plant genetics by date of appointment; effective oral and written communication skills. Desired: gradúate-level coursework in floriculture, plant breeding, genetics, and molecular biology; experience in genetic improvement of plants using traditional and/or biotechnological approaches; experience in greenhouse production systems; effectiveness in teaching. Applicants must send curriculum vitae, graduate transcripts, detailed statement of teaching and research interests, and three letters of reference to: Chair, Floriculture Genetics Search Committee, Department of Horticultural Science, University of Minnesota, 305 Alderman Hall, St. Paul, MN 55108. Review of applications will begin October 10, 1998, and continue until position is filled. The University of Minnesota is an Equal Opportunity Educator and Employer.

The Department of Zoology at North Carolina State University seeks applicants for ASSISTANT PROFES-SOR of conservation biology. This 12-month position requires teaching and advising of undergraduate and graduate students, including the department's sophomore-level core course in ecology, evolution, and behavior, and development of an externally funded research program. Candidates should show potential for excellence in teaching and demonstrated research accomplishment in conservation biology. A Ph.D. is required. Postdoctoral experience is preferred. This position is available 1 November 1998. Applications will be reviewed beginning 1 August 1998 until the position is filled. A letter of application, statements of teaching philosophy and research interests, a curriculum vitae, and names of three references should be sent to: Search Committee, Dr. James F. Gilliam, Department of Zoology, Box 7617, North Carolina State University, Raleigh, NC 27695. Additional information is available on our website: http://www.cals.ncsu.edu/Zoology/. NC State University is an Equal Opportunity/Affinative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR CARDIOVASCULAR-RENAL PHYSIOLOGY

The Department of Physiology and Biophysics at the University of South Florida College of Medicine invites applications for a tenure-track faculty position at the rank of Assistant Professor to be filled during the 1998-99 academic year. Competitive salary and start-up funds are available for an individual who complements the current research interests of the Department and uses cellular and molecular techniques to study cardiovascular and/or renal physiology. This includes individuals with demonstrated ability to integrate molecular and whole animal studies. Applicants must have a Ph.D. and/or M.D. degree and at least three years of postdoctoral training. Successful applicants will be expected to establish an in-dependent, nationally recognized research program supported by extramural funds and effectively teach medical and graduate students. Please send a cover letter that describes research and teaching interests with future plans, curriculum vitae, and the names of three references to: Roger Shannon, Ph.D., Physiology Search Committee, Department of Physiology and Biophysics, University of South Florida, College of Medicine, Tampa, FL 33612-4799. Applications must be received by August 15, 1998, to be considered. USF is an Equal Opportunity Act/Affirmative Action/Equal Access. Minorities and women are encouraged to apply. Disability accommodations, contact: Dr. Shannon, Telephone: 813-974-1547; TDD: 813-974-2218 a minimum of five work-ing days in advance. Website: www.med.usf.edu/ PHYSIO/physiol.html.

ASSISTANT OR ASSOCIATE PROFESSOR DEPARTMENT OF PHARMACOLOGY

A tenure-track position is available for an energetic individual taking a molecular, cellular, and/or genetics approach to modern biomedical research problems. Candidates should have strong evidence of sustained creativity and a temperament that facilitates collegial and collabo-rative interactions. Qualified Ph.D. or M.D. candidates with research interests in the areas of structural biology, cell signaling, or regulation, and with a track record of research funding, are especially encouraged to apply. The successful candidate will receive excellent laboratory space and handsome start-up funds in a setting that fosters her or his professional development. Our multidepartmental graduate programs provide a large pool of graduate stu-dents, and successful candidates will also participate in medical student training. Emory University is located in a wooded, residential area in the outskirts of Atlanta, and has undergone rapid growth in molecular and cellular biomedical research programs. Check us out at website: http://www.emory.edu/PHARMACOLOGY/. Applicants should send curriculum vitae, representative re-prints, a summary of current research and future plans, and names of three or more referees to: Raymond Dingledine, Chairman, Department of Pharmacology, Emory University School of Medicine, Atlanta, GA 30322. Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITION IN APPLIED PHYSICS CALIFORNIA INSTITUTE OF TECHNOLOGY

The applied physics program at Caltech invites application for one tenure-track position as **ASSISTANT PROFESSOR**. We are seeking highly qualified candidates who are committed to a career in research and teaching. Consideration will be given to any research area within the broadly defined scope of applied physics.

Interested applicants are encouraged to complete the registration form at the website: http://www. cco.caltech.edu/~aphhome/register.html and send a résumé with the publication list and a less-than-fivepage research prospectus appended. Please attach your résumé/prospectus file in an e-mail: vahala@cco. caltech.edu. Make the e-mail subject "aphcit search" and use your name as the résumé/prospectus file name. Submission of Adobe pdf is encouraged; however, Word 5.x, 6.x, 98 for Mac or Word 95, 6.x, 97 for Windows will be accepted.

The appointment is contingent upon completion of Ph.D. and the term of the initial appointment is normally four years.

Caltech is an Equal Opportunity/Affirmative Action Europoyer. Members of underrepresented minority groups, veterans, and disabled persons are encouraged to apply.

MAKE THE CONNECTION...

W research, a major division of Fortune 100 American Home Products Corporation, is one of the world's largest research-based pharmaceutical companies and is a leading developer of prescription drugs and nutritional products.

RESEARCH SCIENTIST-PHARMACOLOGY CNS DISORDERS

We are seeking a scientist with a B.S./M.S. in Biology, Cell Biology or a related scientific discipline and 5-10 years experience to participate in research involving the identification, characterization and development of protease inhibitors that block the formation of beta-amyloid peptide.

Requirements for this position include expertise in enzymology and proteases and skills in the identification of novel drug discovery targets using molecular, cellular, immunological and pharmacological approaches. Additional qualifications include experience in the maintenance of tissue culture lines and generation of transient and stable cellular expression systems for the expression of recombinant proteins, the development and implementation in ELISA assays, and assay development to support high throughput screening.

Wyeth-Ayerst offers a competitive salary and benefits package along with one of the best employee stock option award programs in the pharmaceutical industry. Please send your resume with salary requirements to: Wyeth-Ayerst Research, Human Resources Dept, Position #OPSCI-3132, P.O. Box 7886, Philadelphia, PA 19101-7886, or fax to (610) 989-4854. E-mail: jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume). Principals Only. Equal Opportunity Employer M/F/D/V.



GLOBAL OPPORTUNITIES

FIXED TERM: <u>Senior Biochemist / Molecular Biologist</u> <u>Senior Biochemist / Microbiologist</u> Level of appointment and salary are dependent on qualifications and experience

AMBRI is developing an Ion Channel Switch (ICS) Biosensor recently disclosed by the Cooperative Research Centre for Molecular Engineering and Technology. The ICS technology provides a broad sensor platform applicable to many fields requiring molecular detection and is at the forefront of biosensor technology.

Applications are invited for two experienced scientists to join a research team working on the development of novel recombinant human antibodies using phage display. This project represents a new initiative and would involve the application of phage display to the generation of antibodies against a range of infectious agents. The positions are ideally suited to individuals who are achievement oriented and self motivated.

Essential Criteria-Senior Biochemist/Molelcular Biologist: A Ph.D. degree; postdoctoral experience in molecular biology, phage display, protein chemistry, or immunology and a capacity to implement EEO/AA principles.

Essential Criteria-Senior Biochemist/Microbiologist: Tertiary qualifications and at least four years of experience with immunoassays, conjugation of proteins and protein chemistry. Skills in molecular biology would be desirable.

These positions are initially available for one year with excellent prospects of renewal for a further three years.

Enquiries may be directed to Dr. Robyn Ward on telephone: 61 2 9295 8412; facsimile: 61 2 9295 8451; or e-mail: r.ward@garvan.unsw.edu.au. Applications including a résumé may be sent to Dr. Robyn Ward, Department of Medical Oncology, St. Vincent's Hospital, Victoria Street, Darlinghurst NSW 2010 Australia. Closing Date: 24th July, 1998.





TerraGen Diversity Inc.

MICROBIOLOGIST and NATURAL PRODUCT CHEMIST

TerraGen Diversity Inc., a combinatorial biology company, is seeking a senior-level Microbiologist, and a Natural Product Chemist, with three to five years of industrial experience in pharmaceutical discovery research and development. Candidates must be innovative in their approach to science and will be expected to interact well among molecular biology, microbiology, and chemistry groups. Both candidates will be expected to take a leadership role in their respective area in moving TerraGen's lead discovery programs forward. The candidates must be skilled team-players and have the ability to lead and manage in the rapid pace of an entrepreneurial company.

• Microbiologists must have several years of experience in small-scale fermentation, and screening programs. Experience with streptomycete and fungal fermentation is a definite asset.

 Chemist applicants must have considerable knowledge in the isolation, purification and structure determination of natural products from complex mixtures. HPLC, LCMS, and NMR expertise is essential.

TerraGen employs modern molecular approaches to gain access to the molecular diversity of environmental microbes through gene isolation and surrogate host expression. The Company is based in 12,000 sq. ft. of modern laboratory space on the campus of the University of British Columbia. The position offers competitive remuneration and benefits and the opportunity to pursue a productive career on Canada's west coast.

Send CV details to: Dr. Joe McDermott, TerraGen Diversity Inc. Suite 300 - 2386 East Mall (UBC), Vancouver, BC, V6T 1Z3 Canada. Tel: (604)221-8896; Fax: (604) 221-8881; e-mail: joe@terragen.com

AWARD

S. T. Li Prize For the Achievement in Science and Technology

The S. T. Li Foundation has established the S. T. Li Prize to recognize achievement of outstanding scholars in science and technology. The award was established in accordance with the wish of **Dr. Shu-tien Li**, the famed educator, scientist, and engineer. The Directors of S. T. Li Foundation have been vested with the authority to select the recipients of the S. T. Li Prize and to determine of the value of each award. The foundation expects to award the prize annually. In 1999, the S. T. Li Prize has a value of \$25,000.

The following guidelines will apply in the selection of recipients of the award:

1. The work being honored should have been published in peerreviewed journals during the last three years.

2. The prize will be awarded to one nominee. The award shall be used for a current and future research project. As a condition to accept the prize, the awardee shall agree that if any publications result from the research, the support of S.T. Li Foundation shall be appropriately acknowledged.

3. Nominations, including a curriculum vitae and a brief description of the significance of the nominee's work, and two letters of recommendation from qualified individuals in the nominee's field should be sent to the S. T. Li Foundation, P.O. Box 8286, Rapid City, SD 57709-8286. Nominations must be submitted from July 15 to September 15 every year. The nominee cannot submit nomination on his or her behalf.



Wayne Hughes Institute, a fast-paced nonprofit organization dedicated to combating cancer, AIDS, and diseases of the immune system, has a position open in the area of gene delivery and gene therapy. Successful candidate should possess Ph.D. or M.S. with extensive expertise in molecular biology, pharmacology, or related discipline and have experience with design, construction, and application of viral and/or nonviral gene delivery system. Demonstrated expertise in one or more of the following areas is desirable: gene delivery using viral vectors such as retrovirus, adenovirus, herpesvirus; non-viral gene delivery systems; gene transfer *in vitro* and in animal models.

We offer a competitive salary and benefits package. For consideration, please send curriculum vitae with salary requirements to:

> Wayne Hughes Institute Attn: Human Resources P.O. Box 8178 St. Paul, MN 55108 FAX: 612-697-0645

Equal Opportunity Employer.

CHILDREN'S NUTRITION RESEARCH CENTER BAYLOR COLLEGE OF MEDICINE

The Children's Nutrition Research Center (CNRC) at Baylor College of Medicine is seeking applications from qualified individuals with established credentials in mass spectrometry facility that currently houses 12 instru-ments. Candidates should have (1) demonstrated exper-tise in the basic discipline of mass spectrometry; (2) preferred experience in quantitative mass spectrometry methods; (3) demonstrated experience in the operation, troubleshooting, and maintenance of TCMS, gas isotope ratio MS, GC-combustion-IRMS, and LCMS systems; (4) rec-ognized skills in teaching individuals in training the prop-er use of the various mass spectrometers; and (5) facility with the mathematics required for quantitative analyses using stable isotope tracers and, preferably, an understanding of the principles of tracer kinetic modeling. Demonstrated prior experience in managing an instru-ment facility is highly desirable. The level of University appointment and salary compensation will be commensu-rate with the applicant's accomplishments and experience. A faculty appointment is available to those who, in addition to the above, have a demonstrated record of independent research in mass spectrometry. Interested candidates should submit their curriculum vitae and the names of three references to: Morey W. Haymond, M.D., Director, Stable Isotope Laboratory, Children's Nutri-tion Research Center, Baylor College of Medicine, 1100 Bates Street, Houston, TX 77030-2600. Tele-phone: 713-798-7164; FAX: 713-798-7119; e-mail: mhaymond@bcm.tmc.edu.

Baylor College of Medicine is an Equal Access/Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly encouraged to apply.

VISITING PROFESSORSHIP IN THE ANATOMICAL SCIENCES UCR/UCLA Program in Biomedical Sciences

Love to teach? The Division of Biomedical Sciences at the University of California, Riverside is looking for a scientist to assist in medical school instruction. The teaching assignment includes lectures and laboratories in histology, gross anatomy, and neurosciences. Histology is taught from a functional perspective and anatomy and neurosciences include clinical correlations. Additional duties include production of digital microscopic and macroscopic images for student self study and exams. Level and duration of appointment and percent of time are negotiable. Salary will be commensurate.

Interested individuals should contact: Dr. Ameae Walker, e-mail: ameae.walker@ucr.edu. Instruction begins September 11, 1998. Please provide a full curriculum vitae, three letters of recommendation, and some form of teaching evaluation. Mail to: Anatomy Search Committee, Division of Biomedical Sciences, University of California, Riverside, CA 92521-0121. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

Nutrition/food science. The Department of Nutrition and Food Science, Auburn University, is accepting applications for a tenure-track research and teaching position at the **PROFESSOR** or **ASSOCIATE PROFESSOR** level to begin January 1, 1999. The Department is affiliated with the School of Human Sciences. Appointment is on a nine-month basis (three-month summer appointment possible) with competitive salary commensurate with qualifications and experience. The appointee will be responsible for developing an independent research pro-gram supported by extramural funding in an area of food science or nutrition. Teaching responsibilities may include nutrition or food science courses at the undergraduate and/or graduate level as well as advanced courses in the appointee's area of expertise. Advising will include undergraduates and directing M.S. and Ph.D. students in nutrition and/or food science. The appointee will be en-couraged to engage in collaborative research and teaching with colleagues in the Department of Nutrition and Food Science and other related departments. Required: Ph.D. in nutrition, food science, or related area, with demon-strated knowledge in area of expertise as well as strong communication, writing, and research skills; demonstrated ability to obtain extramural funding; evidence of effective teaching. Screening of completed applications will begin August 15, 1998, and continue until a candidate is selected and recommended for appointment. Applicants should submit a cover letter including a general statement of interest in the position as well as specific research and teaching interests; detailed résumé with publication list; and names, postal and e-mail addresses, and telephone and FAX numbers of three references. Send to: Dr. Robert Keith, Professor and Search Committee Chair, Department of Nutrition and Food Science, 358 Spidle Hall, Auburn University, Auburn Univer-sity, AL 36849-5605. Telephone: 334-844-3273; FAX: 334-844-3268. See website: http://nfs.humsci. auburn.edu for more information about the Department of Nutrition and Food Science and Auburn University. Minorities and women are encouraged to apply. Auburn is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR, IN VITRO DRUG METABOLISM

In Vitro Technologies (IVT) is leading the way in developing and providing innovative in vitro testing services and unique products for the pharmaceutical and biotech-nology industry. IVT is currently seeking an outstanding Scientist to play a lead role in expanding our in vitro drug metabolism programs. Applicants should have a Ph.D. and significant experience with various in vitro models, in vitro-in vivo extrapolation, and in the design and conduct of in vitro programs to identify the pharmacokinetic profiles and metabolic pathways of new chemical entities. Strong interpersonal and communication skills (presentation, verbal, and written), and demonstrated ability to work in a team environment are required for this position. The successful candidate will have responsibility for a number of roles, including serving as Study Director on various GLP projects, designing and overseeing the conduct of customer-sponsored research projects, participat-ing in strategic planning, and conducting/publishing original research. He/she will have opportunities to attend national and international meetings to present the results of their research and to represent the company. IVT offers excellent compensation and benefits programs. Send résumés to: Box HR, In Vitro Technologies, 1450 South Rolling Road, Baltimore, MD 21227. FAX: 410-455-1245; e-mail: resume@invitrotech. com. IVT is an Equal Opportunity Employer.

The Department of Neurology and Neurological Sciences at Stanford University School of Medicine is searching for an outstanding Investigator or Clinician-Investigator to assume the rank of ASSISTANT PROFES-SOR, ASSOCIATE PROFESSOR, or PROFESSOR in the University Tenure Line. The successful candidate will be expected to develop an independent program of basic or clinical research into the biology of nervous system neoplasms and will participate in the research and teaching programs of the Neurology Department. Applicants will hold the M.D., Ph.D., or both. We are most interested in Neurologists with neuro-oncology research and a commitment to clinical care and teaching. Applications and nominations should be directed to: William Mobley, M.D., Ph.D., Department of Neurology and Neurological Sciences, Room H3160, Stanford University Medical Center, Stanford, CA 94305-5235. Stanford University is committed to increasing representation of uromen and members of minority groups on its facility and particularly encourages applications from such candidates.

POSITIONS OPEN



The Center for Marine Conservation (CMC) has a po-sition for a **RESEARCH SCIENTIST** in our Washington, D.C. office. The Research Scientist will (1) oversee the development and implementation of policies and programs regarding conservation biology relating to living marine resources and their habitats, (2) serve as the lead scientist regarding conservation biology particularly relating to sea turtles, (3) engage in scientific research and bublication to further our conservation biology objec-tives, (4) represent CMC before Congress, federal and state agencies, the scientific community, and international bodies, (5) provide leadership within the conservation community and before the media on conservation issues, particularly sea turtle issues, and (6) develop funding proposals and resultant reports to funders. A graduate degree in marine science or closely related field required (Ph.D. preferred) with at least five years in conservation advoca-cy. A proven record of achievement in the field, demonstrated competence in research and publishing, along with expertise in population biology, especially marine organisms is highly desired. Send cover letter and résumé to: Sharon Tryon, Center for Marine Conservation, 1725 DeSales Street N.W., Suite 600, Washington, DC 20036. An Equal Opportunity Employer.

The National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health seeks a FACILITY MANAGER of its Transgenic Mouse Facility (TMF), to oversee a multiple-service facility, located in Frederick, Maryland. This position is offered as a STAFF SCIENTIST at a salary level dependent on relevant experience for a candidate who holds a Ph.D. or other doctoral degree in embryology, cell biology, molecular biology, or a related field, who has completed a Postdoctoral Research Fellowship, and who has experience in managing a transgenic mouse facility. Demonstrated ability to design and express gene constructs for production of transgenic animals and targeted mutants (knockouts) is required, as well as hands-on experience in procedures for rederivation of pathogen-free animals, and in managing complex rodent breeding. Familiarity with cryopreservation of mouse embryos is expected. Interested candidates should submit a curriculum vitae, list of publications, statement of relevant experience and professional goals, and three letters of reference to:

Dr. Ronald H. Schwartz Transgenic Mouse Facility Search Committee Building 4, Room 111 NIAID National Institutes of Health Bethesda, MD 20892 Closing date: July 31, 1998. NIH is an Equal Opportunity Employer.

SENIOR RESEARCH SCIENTIST and POST-DOCTORAL FELLOW. Exciting opportunity to join an expanding group of cell and molecular biology researchers at LIJ of the North Shore-Long Island Jewish Health System, studying gene therapy and therapeutic angiogenesis. Candidates should have Ph.D. in molecular or cell biology, and *in vivo* experience. Competitive salary commensurate with experience and qualifications. Send curriculum vitae to: Nancy McCarthy, Department of Radiation Oncology, Laboratory for Translational Research, Long Island Jewish Medical Center, 270-05 76th Avenue, New Hyde Park, NY 11040. LIJ is a teaching affiliate of the Albert Einstein College of Medicine. An Equal Opportunity Employer.

INSTRUCTOR/ASSISTANT PROFESSOR

A full-time position is available in the Chemoprevention Center, School of Health Related Professions, University of Alabama at Birmingham (UAB). The individual will assist in the day-to-day operation of cancer chemoprevention and pharmacology studies. Ph.D. required. Send curriculum vitae to: Dr. Clinton J. Grubbs, Chemoprevention Center, University of Alabama at Birmingham, 1675 University Boulevard, Birmingham, AL 35294. Affinnative Action/Equal Opportunity Employer.

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Research Scientist Functional Genomics

We have currently a major commitment in the domain of genomics-based pharmaceutical research as a result of alliances with Human Genome Sciences / Smithkline Beecham and Genset

We have an immediate opening for the following position : You will establish a functional genomics unit of 2-3 persons dedicated to elucidating the function of newly identified genomics targets.

Qualifications : Ph.D in molecular or cellular biology with 1/3 years of postdoctoral experience. A solid background in reverse genetics and biology of C. Elegans or Zebrafish or Drosophila is required. Experience of the yeast two-hybrid system would be an advantage. Knowledge of French is not essential.

The position requires the ability to collaborate within a multidisciplinary environment. In return for your expertise, we offer a competitive salary/benefits package that includes the opportunity to participate in the success of the company, and a relocation assistance.

The post will be based at Rueil-Malmaison, on the western outskirts of Paris. This excellent location offers a vast array of cultural, recreational and educational opportunities.

If you are interested, please forward your application (covering letter and CV) quoting the reference GMB-2 to Synthélabo Recherche, Human Resources dept., 10 rue des Carrières, 92500 Rueil-Malmaison, France.

Travel expenses will be paid by the company, who will also arrange for accomodation. All correspondence will be done in strict confidence.

THE WORLD HEALTH ORGANIZATION seeks a **PROJECT MANAGER** for its **ROLL BACK MALARIA PROJECT**



The Roll Back Malaria Project addresses a key priority of the WHO as identified by its recently elected Director-General, Dr Gro Harlem Brundtland, which is a new and intensified campaign against malaria.

PROJECT OBJECTIVES: To prevent and control malaria globally, with the specific objective of achieving a significant reduction in malaria morbidity and mortality over a defined period of time and unifying national and international efforts against malaria through:

- implementation strategies on epidemiological and regional bases
- technical support in planning, implementation and evaluation of country programmes
- strategies to reach out to, and work in partnership with, other international organizations and sectors of society
- resource mobilization and
- coordinated malaria prevention and control efforts of countries and international donor agencies.

The project approach represents a new initiative for WHO's engagement in public health, drawing together expertise and resources from across the Organization, working with a range of international partners and ensuring its implementation through the framework of health sector development in countries.

THE PROJECT MANAGER WILL: direct and supervise a multidisciplinary team of international experts and advise the Director-General, Regional Directors and Member States on the project including global strategy and advocacy for malaria prevention and control.

OUALIFICATIONS: Postgraduate qualifications in public health, tropical medicine or relevant fields. Knowledge of and technical expertise in malaria and high respect in the field. Extensive management skills in the planning and coordination of multi-disciplinary public health programmes in a multinational context including the implementation of disease control programmes. Leadership skills in the management of people. Ability to reach out to others in a global malaria control effort and to communicate effectively with the media and governments. Proven ability to promote, advocate and raise funds. Excellent knowledge of English or French and good working knowledge of the other language.

The appointment, based in Geneva, Switzerland, will be for an initial period of up to three years, with an attractive package of salary, international allowances and benefits.

Applicants are requested to submit either an application form (Personal History Form) which is available on the Web site at http://www.who.ch/per/vacancies, or a detailed curriculum vitae. The application/CV should reach the following office by 22 July 1998 quoting reference "PRC/MAL"

Head, Professional Candidates (PRC/MAL), World Health Organization 20, avenue Appia - CH-1211 Genève 27 (WHO Facsimile Nº 791.41.77)

WHO has a smoke-free environment



Applications from women are encouraged

MOLECULAR BIOLOGIST GS-0401-12/15

Shape the future! The U.S. Department of Agriculture, Agriculture Research Service, Grand Forks Human Nutrition Research Center located in Grand Forks, North Dakota invites applications from outstanding individuals with broad background in molecular biology and nutritional cell culture for a Molecular Biologist position, GS-12/15 (\$46,254 to \$76,456, salary commensurate with experience), to lead research to determine the functional mechanisms by which trace mineral elements regulate products of gene expression in humans and animals. Team research involving human volunteers will be supported by experiments with animals and appropriate cel-lular or molecular models. Collaborative arrangements with scientists at the University of North Dakota and/or other institutions are possible. Candidates must have a Ph.D., M.D., or Ph.D.-M.D. degree in a closely related discipline. Applicants should submit a curriculum vitae, a list of publications, and a succinct outline of research plans and goals. This is a competitive, permanent appoint-ment *and U.S. citizenship is required.* For additional information on job requirements and application procedures, please call: Hayley Lauritsen, Telephone: 701-795-8370 between 8:00 a.m. and 3:00 p.m., Monday through Friday, or write to: United States Department of Agriculture, Agriculture Research Service, Human Re-sources Department, WSB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106. FAX: 701-795-8395. Please reference announcement number ARS-D8W-189 Applications must be postmarked by July 31, 1998, to be considered. ARS is an Equal Opportunity Employer.

The Department of Physiology at The University of Arizona is seeking a **POSTDOCTORAL FELLOW** (**RESEARCH ASSOCIATE**) to begin work in the Respiratory Physiology Laboratory. The successful candidate will study the neuromuscular control of the pharyngeal and nasal airways in anesthetized animals and/or human subjects. Position available September 1, 1998, with possibility of annual renewal for up to five more years. Minimum requirements are the Ph.D., M.D., or equivalent. Preferred qualifications: experience in electrophysiology, respiratory physiology, and small animal surgery. Review of applications begins August 15, 1998, and will continue until the position is filled. Send curriculum vitae, including references, to: **Ralph F. Fregosi**, Ph.D., **Position 996525**, **Department of Physiology, P.O. Box 245051**, **College of Medicine**, **The University of** *Arizona is an Equal Employment Opportunity/Affinative Action Employer. Minorities/Women/Disabled/Veterans.*

A POSTDOCTORAL POSITION in the area of cell biology is available at the College of Physicians and Surgeons, Columbia University. The project involves integrating endocytic and cholesterol trafficking pathways in macrophages. The ideal candidate will have a thorough knowledge of the latest advances in endocytic trafficking and experience with techniques in cell biology, including fluorescence microscopy, and in lipid biochemistry. Send curriculum vitae and three references to: Dr. Ira Tabas, College of Physicians and Surgeons, Columbia University, PH 8-East-101B, 630 West 168th Street, New York, NY 10032. E-mail: iatl@columbia.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study the role of p300/CBP coactivator proteins in cell cycle regulation and mammary epithelial cell differentiation and mammary gland development. Experience in molecular biology is an asset. Send curriculum vitae and letters of recommendation to: Dr. Bayar Thimmapaya, Professor of Microbiology-Immunology, Lurie Cancer Center, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611. Telephone: 312-503-5224; FAX: 312-908-1372; e-mail: bayar@casbah.acns.nwu.edu.

DIRECTOR OF SALES AND MARKETING. Growing biotechnology company seeks experienced professional with demonstrated ability to manage sales and marketing functions for contract services associated with antibody production. Education in life sciences, knowledge of the antibody or contract research markets desirable. Competitive salary and benefits. Respond to: Director of Human Resources, Taconic Farms Inc., 273 Hover Avenue, Germantown, NY 12526. FAX: 518-537-7287. Equal Opportunity Employer/Affimative Action. POSITIONS OPEN



Message Pharmaceuticals, Inc. ("Message") is exploiting a novel and proprietary approach for identifying drugs that increase or decrease the *in vivo* production of proteins by regulation of genetic messages. To accomplish our goals, Message is recruiting key personnel at the **DIREC-TOR**, **SCIENTIST**, **POSTDOCTORAL** and **TECH-NICAL** levels in the following areas: RNA biology: individuals for these positions need to

RNA biology: individuals for these positions need to have a strong understanding of RNA structure or RNA/ RNA binding protein interactions.

Compound screening: individuals must be capable of developing, implementing, or running high-throughput assays. Knowledge of robotic systems beneficial. Pharmaceutical or biotechnology experience desired.

Chemistry: experienced Medicinal Chemists and Chemists with a knowledge of nucleic acids, in particular RNA, are needed.

Message has immediate openings in each of these areas and is in the process of filling these positions. Successful candidates will be innovative, team players. To apply for any of these positions send a cover letter and curriculum vitae to: Human Resources, Message Pharmaceuticals, Inc., 34 Mt. Pleasant Drive, Aston, PA 19014.

POSTDOCTORAL POSITIONS UCLA SCHOOL OF MEDICINE

These posts are ideal for individuals wishing to obtain further training in genetics, neurobiology, and behavior. The goal is to identify the genes underlying schizophrenia by using high-throughput genomic technologies in the mouse (Smith et al., Nature Genetics 16:28-36). Ph.D. and/or M.D. required. Previous experience in molecular biology and mouse genetics desirable. Applications should be sent to: Desmond Smith, Department of Molecular and Medical Pharmacology, UCLA School of Medicine, 23-120 CHS, Box 951735, Los Angeles, CA 90095-1735. FAX: 310-825-6267; e-mail: dsmith@mednet.ucla.edu.

POSTDOCTORAL POSITIONS are available to study (1) cytokine receptor signaling pathways in hematopoietic development and (2) the structure and assembly of functionally active cytokine receptors. Candidates should have a working knowledge of molecular biology and protein biochemistry. Experience in the culture of primary hematopoietic cells is helpful, but not required. Interested candidates can send their curriculum vitae and names of three references to: Dr. Stephanie S. Watowich, Department of Immunology, The University of Texas M. D. Anderson Cancer Center, Box 178, 1515 Holcombe Boulevard, Houston, TX 77030. FAX: 713-794-1322; e-mail: swatowic@ notes.mdacc.tmc.edu.

POSTDOCTORAL POSITION available August 1, 1998, to study mechanisms involved in the induction of tolerance to orally administered soluble antigens and their alteration in the presence of mucosal infection. U.S. ditzen or permanent resident with experience in immunology preferred. Send curriculum vitae and three references (preferably by e-mail) to: Cathryn Nagler-Anderson, Ph.D., Mucosal Immunology Laboratory, Massachusetts General Hospital East, Building 149, 13th Street, Room 3308, Charlestown, MA 02129. E-mail: nagler_a@helix.mgh.harvard.edu.

University of California, Los Angeles. POSTDOC-TORAL POSITION to study ion channel modeling. Ph.D. in physiology, physics, biochemistry, or molecular biology. Preferred background: math, physics, and computing. Send curriculum vitae and three references to: Dr. Enrico Stefani, UCLA, Department of Anesthesiology, BH-612 CHS, Box 951778, Los Angeles, CA 90095-1778. Website: http://www.anes.ucla.edu/ ~estefani; e-mail: estefani@ucla.edu; FAX: 310-825-6649.

POSTDOCTORAL POSITIONS available to study glucocorticoid-induced expression of the fatty-acid synthase gene in fetal lung and signal transduction mechanisms in surfactant secretion in isolated lung cells. Background in molecular biology and/or protein phosphorylation required. Send curriculum vitae and names of three references to: Dr. Seamus A. Rooney, Department of Pediatrics, Yale University, P.O. Box 208064, New Haven, CT 06520-8064.

POSTDOCTORAL RESEARCH POSITION VIRAL EXANTHEMS AND HERPESVIRUS BRANCH Division of Viral and Rickettsial Diseases Centers for Disease Control and Prevention

POSITIONS OPEN

The Viral Exanthems and Herpesvirus Branch (VEHB) Molecular Epidemiology Group is looking for a Postdoctoral-level scientist with a strong desire to apply state-ofthe-art molecular technology to important biologic questions of public health significance. Desire to work in a collaborative multidisciplinary environment is required as is experience with RNA molecular protocols. A background in experimental pathology is a plus.

The Postdoctoral position is to investigate the molecular pathology of human papillomavirus infection and oncogenesis. Current studies include analysis of viral gene expression in infection and malignancy and molecular markers of prognosis in cervical cancer. The work will require development of RT-PCR and other molecular assays applicable to clinical samples.

Address replies with statement of interests, curriculum vitae, and three references to: Dr. Elizabeth Unger, Telephone: 404-639-3533; e-mail: eru0@cdc.gov.

POSTDOCTORAL FELLOW positions available beginning September 1, 1998, for research on the cell and molecular biology of human oral epithelial and epidermal carcinogenesis. One project is aimed at identifying genes and mechanisms involved in oral cancer progression, focusing on immortalization and resistance to apoptosis. The other project is aimed at understanding the roles of oncogenes and developmental regulatory genes in basal cell carcinoma of the skin. Both positions require a Ph.D. with strong background in molecular genetics or cell biology and will provide training in cancer cell biology, retroviral vectors, human epithelial cell culture, and somatic cell genetics. Interested individuals who, as citizens or permanent residents with less than five years of postdoctoral experience, qualify for NIH training grant support should send a cover letter, curriculum vitae, reprints of relevant publications, and names of three references to: Dr. James G. Rheinwald, Division of Dermatology, Brigham and Women's Hospital, Harvard Institutes of Medicine, Room 664, 77 Avenue Louis Pasteur, Boston, MA 02115. The Brigham and Women's Hospital is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS CLEVELAND CLINIC FOUNDATION LERNER RESEARCH INSTITUTE

Postdoctoral positions are available immediately to study (a) molecular mechanisms of a new protein, myotrophin, that stimulates myocyte growth and initiates cardiac hypertrophy (*J. Biol. Chem.* **265**:16635, 1990; *J. Biol. Chem.* **271**:2812, 1996); and (b) effects of growth factors on changes in collagen formation during hypertensive hypertrophy and its transition to heart failure. A strong background in molecular biology is required. Some research experience in cell biology is desirable. A special remuneration package will be available for exceptionally qualified candidates. Applicants should send a current curriculum vitae and three letters of reference to: Dr. Subha Sen, Staff, Department of Molecular Cardiology, The Lerner Research Institute, Mail Code FF40, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-444-9263; e-mail: sens@ccsmtp.ccf.org. The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH position available for studies of hepatitis C virus immunity and pathogenesis. The project will focus primarily on the role of T cell-mediated immune responses in control of HCV infection. A background in immunology and virology is required. Applicants should send their curriculum vitae and names of three references to: Christopher M. Walker, Ph.D., Children's Hospital Research Foundation, Room W503, 700 Children's Drive, Columbus, OH 43205.

POSTDOCTORAL POSITIONS available immediately to study excitotoxicity in retinal ganglion cells utilizing viral protection, ionic imaging, and single cell PCR. Curriculum vitae and references to: Evan Dreyer, M.D., Ph.D., University of Pennsylvania, 51 North 39th Street, Philadelphia, PA 19104. E-mail: ebd@mail. med.upenn.edu. Equal Opportunity Employment/Affirmative Action.

U NOVARTIS

The Metabolic and Cardiovascular Diseases Department of Novartis Pharma Research is looking for an animal pharmacologist/physiologist

Senior Scientist Obesity Pharmacology

Your key role – You will direct a research laboratory in obesity pharmacology/physiology and be an integral part of various program teams conducting drug discovery in the obesity area. You will be responsible for the implementation and provision of the necessary animal models to support ongoing research.

Your profile – You have a Ph.D. in pharmacology/physiology and at least 2 years of postdoctoral experience in a leading obesity pharmacology/physiology laboratory in academia or industry; knowledge in the neural and endocrine control of food intake; several years of practical experience and a proven publication record showing use of the required in vivo methodologies. Scientific excellence, effective organizational skills and the ability to work in multidisciplinary teams are essential. You are also fluent in English with excellent writing skills.

Please send your resume to:

Novartis Pharma AG Personaldienst (Ref MCD) Hanspeter Rüedi CH-4002 Basel/Switzerland

THE WORLD HEALTH ORGANIZATION seeks a PROJECT MANAGER for its CAMPAIGN AGAINST TOBACCO



The Campaign Against Tobacco Project addresses a key priority of WHO as identified by its recently elected Director-General, Dr Gro Harlem Brundtland, which is a new and intensified campaign against tobacco.

PROJECT OBJECTIVES: To promote tobacco-free societies and lifestyles by unifying national and international efforts to decrease the use of tobacco through:

- implementation strategies on epidemiological, socio-economic and regional bases
- national and international programmes and campaigns against the advertisement, subsidy and glamourization of tobacco
- strategies to reach out to, and work in partnership with, other international organizations and sectors in society
- resource mobilization and
- coordinated anti-tobacco efforts of countries and international donors.

The project approach represents a new initiative for WHO's engagement in public health, drawing together expertise and resources from across the Organization, working with a range of international partners and ensuring its implementation through the framework of health sector development in countries.

THE PROJECT MANAGER WILL: direct and supervise a multidisciplinary team of international experts and advise the Director-General, Regional Directors and Member States on the project including global strategy and advocacy for the campaign against tobacco.

<u>OUALIFICATIONS</u>: Postgraduate qualifications in one of the health or social sciences. Knowledge of and technical expertise regarding tobacco issues, including medical, social, economic, legislative and epidemiological aspects. Extensive management skills in the planning and coordination of multi-disciplinary public health and research programmes in a multinational context including the development and implementation of anti-tobacco campaigns at the national and/or international levels. Leadership skills in the management of people. Media communication skills. Proven ability to promote, advocate and raise funds. Excellent knowledge of English or French and good working knowledge of the other language.

The appointment, based in Geneva, Switzerland, will be for an initial period of up to three years, with an attractive package of salary, international allowances and benefits.

Applicants are requested to submit either an application form (Personal History Form) which is available on the Web site at: http://www.who.ch/per/vacancies. or a detailed curriculum vitae. The application/CV should reach the following office by 22 July 1998 quoting reference "PRC/TOB". Head, Professional Candidates (PRC/TOB), World Health Organization

20, avenue Appia - CH-1211 Genève 27 (WHO Facsimile N° 791.41.77)

Applications from women are encouraged

WHO has a smoke-free environment



The Department of Surgery at Georgetown University Medical Center, Washington, D.C., invites applications for **POSTDOCTORAL POSITIONS** to investigate: (1) characterization of a novel redox-sensitive transcription factor modulating hepatocyte-inducible nitric oxide synthase promoter activity in rat and human models; (2) role of nitric oxide-mediated S-nitrosylation of NF- κ B and its attendant affects on NF- κ B-dependent gene transcription in macrophages; (3) role of mechanical forces (shear stress and pulse pressure) in regulating endothelial control of vascular smooth muscle cell proliferation and migration: the role of MAPK, uPA, PAI-1, and MMP; and (4) vascular smooth muscle cell phenotype: its role in determining mechanical force-induced regulation of MAPK, uPA, and MMP signaling, migration, and growth. The ideal candidates will have a recent Ph.D. with skills in molecular and cell biology, gene cloning, transfection, analysis of gene expression, and protein isolation and tissue culture techniques.

Send curriculum vitae and the name of three referees for positions 1-and 2 to: Paul Kuo, M.D., Professor of Surgery and Physiology, and positions 3 and 4 to: Paul A. Cahill, Ph.D., Associate Professor of Surgery and Physiology, Georgetown University Medical Center, Pasquerilia Healthcare, 4th Floor, 3800 Reservoir Road N.W., Washington, DC 20007. Email: cahillp@medlib.georgetown.edu.

Two-year **POSTDOCTORAL POSITION** available to study the basic biology of sleep and circadian rhythms. This position requires a Ph.D. and/or M.D., and experience in molecular biology, protein biochemistry, and tissue culture. The training is supported by an NIH-funded research training grant. For further information and application form, individuals should contact:

Allan I. Pack, M.D., Ph.D. Center for Sleep and Respiratory Neurobiology 991 Maloney Building Hospital of the University of Pennsylvania 3600 Spruce Street Philadelphia, PA 19104-4283

Minority applications are encouraged; applicants must be U.S. citizens or permanent residents.

POSTDOCTORAL POSITIONS DEPARTMENT OF ADULT ONCOLOGY DANA-FARBER CANCER INSTITUTE

Postdoctoral positions available starting October 1, 1998, to study the molecular genetics of breast cancer. Experience in molecular biology and human genetics is preferred. Please send curriculum vitae and the names of three references to:

> Attn: Human Resources, Code KP Dr. Kornelia Polyak Dana-Farber Cancer Institute 44 Binney Street Boston, MA 02115

Equal Opportunity Employer.

POSTDOCTORAL POSITION for a PLANT **MOLECULAR BIOLOGIST** to develop promoter expression casettes for the high-level expression of proteins in the epidermis. Applicants should send a letter stating their research interests, experience, and background, as well as copies of publications, curriculum vitae, names and telephone numbers of three references to: Dr. Michael S. Dobres, NovaFlora, Inc., University City Science Center, Suite 350, Philadelphia, PA 19104. Telephone: 215-387-5060; FAX: 215-387-5455; e-mail: info@novaflora.com; website: http://www.novaflora.com.

POSTDOCTORAL/VISITING SCIENTIST position is available for the Jeff Coleman Cardiac Research Program to study molecular mechanisms of cardiac disease. Molecular biology experience required. Send curriculum vitae and names of three references to: Coleman Cardiac Research Program, Orlando Regional Healthcare System Health Research Institute, 1414 South Kuhl Avenue, Orlando, FL 32806. FAX: 407-426-9851.

POSTDOCTORAL POSITION available immediately investigating programmed ribosomal frameshifting in a yeast model system. Send curriculum vitae and contact information for three references to: Jonathan D. Dinman, Ph.D., Department of Molecular Genetics and Microbiology, University of Medicine and Dentistry of New Jersey–Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854. FAX: 732-235-5223; e-mail: dinmanjd@umdnj.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS MARINE BIOMEDICAL RESEARCH

The Whitney Laboratory, a center for marine biomedical research in the University of Florida, announces the availability of postdoctoral training in the areas listed below. The Laboratory is exceptionally well equipped for research in cell and molecular biology using marine animals in a highly interactive research and training environment.

Barry W. Ache: functional organization of olfactory glomeruli.

Peter A. V. Anderson: structure and function of calcium channels.

Barbara-Anne Battelle: molecular mechanisms underlying circadian changes in retinal function. William R. Harvey: molecular physiology of inverte-

William R. Harvey: molecular physiology of inverte brate epithelia.

Dietmar Kultz: intracellular signaling in response to osmotic stress.

Paul J. Linser: regulation of differential gene expression in vertebrate eye development.

Leonid Moroz: nitric oxide and other transmitters in marine invertebrates.

Further information about the Laboratory, details of the positions, and application instructions are available at our website: www.whitney.ufl.edu. The University of Florida is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITIONS BRIGHAM AND WOMEN'S HOSPITAL AND HARVARD MEDICAL SCHOOL

The Department of Pathology at Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts, has available Postdoctoral Research positions for M.D. and/or Ph.D. candidates and wishes to actively recruit minority applicants for these Research Fellowships. The Department's principal research group is working in the following areas: vascular cell biology, molecular oncology and development, immunology, molecular cytogenetics, experimental renal disease, and pulmonary pathophysiology. The Department has an interactive research program with over 30 established Investigators. Interested applicants should send curriculum vitae to: Ramzi S. Cotran, M.D., Chairman, Department of Pathology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.

The Brigham and Women's Hospital is an Equal Opportunity/ Affirmative Action Employer.

Two POSTDOCTORAL RESEARCH ASSOCI-ATE positions, funded by NIH, are available immediately to study the acute and chronic aspects of the negative effect of alcohol on cardiovascular neurobiology. Studies will involve hemodynamic and electrophysiologic measurements in chronically instrumented conscious rats as well as central administration of drugs to investigate the role of central sympathetic pathways in the interaction. Candidates must have a Ph.D., M.D., D.V.M., or equivalent degree. Familiarity with molecular neurobiology and/or patch-clamping is desirable. Send curriculum vi tae, description of research experience, and names of three references to: Dr. Abdel A. Abdel-Rahman, Department of Pharmacology, East Carolina University School of Medicine, Greenville, NC 27858. Federal law requires proper documentation of identity and employability at the time of employment. Affirmative Action/ Equal Employment Opportunity

POSTDOCTORAL POSITION to explore immunological dysfunction of the VLA1 knockout mouse. This collagen receptor is expressed by T and NK cells in autoimmune diseases. It supports migration and cell proliferation, and may contribute to T cell memory. Good molecular biology skills and an interest in immunology essential. Curriculum vitae and names of referees should be sent to: Prof. Humphrey Gardner, MB21, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037 USA. FAX: 619-784-9821; email: humphrey@scripps.edu.

POSTDOCTORAL or **RESEARCH ASSOCIATE** to study cell polarity development in *S. cerevisiae.* (1) Purification and analysis of complexes bearing particular PH, SH3, and LIM domain proteins that are localized to sites of polarized growth. (2) Investigation of the roles of Rho-type GTPases in the assembly, localization, and function of these complexes. Contact: Alan Bender, Department of Biology, Indiana University, Bloomington, IN 47405. E-mail: abender@sunflower.bio.indiana.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION BIOMOLECULE MASS SPECTROMETRY NSF HIGH-FIELD FT-ICR MS FACILITY

POSITIONS OPEN

A Postdoctoral position at \$35,000 per year is available in biological applications of high-performance Fourier transform mass spectrometry. State-of-the-art equipment includes electrospray and MALDI ion sources for 9.4 T and 11 T widebore supercon magnets. The candidate will participate in one or more projects, including identification and structural analysis of proteins, noncovalent adduct stability, isotopic amplification, solution versus gasphase conformation, H/D exchange as a probe of surface accessibility, and mapping of contact surfaces between macromolecules. Applications include proteomics, cell cycle regulation, cytokines in biological fluids, and DNA and RNA base-pairing. Prior experience in structural bi-ology and/or biological mass spectrometry is essential. Submit graduate transcript, updated curriculum vitae including publications and presentations, a page on prior research accomplishments, and a short description of proposed research area(s), and have three reference letters sent to: Prof. Alan G. Marshall, Director, ICR Pro-gram, National High Magnetic Field Laboratory, florida State University, 1800 East Paul Dirac Drive, Tallahassee, FL 32310. FSU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN NEUROSCIENCE

Two Postdoctoral positions are available. One is to study mechanisms that regulate dendritic transport of mRNA and the localization of mRNA at synapses. The second is to study genetic determinants of cellular responses to nervous system injury using murine models. Applicants should submit a curriculum vitae and the names and telephone numbers of three references to:

Postdoctoral Search c/o Oswald Steward, Ph.D., Professor and Chair Department of Neuroscience University of Virginia Health Sciences Center Charlottesville, VA 22908

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

POSTDOCTORAL POSITION

A Postdoctoral position is available to study the role of nitric oxide and tyrosine phosphatases in vascular remodeling and vascular injury in intact animals. Preference will be given to candidates who have a recent Ph.D. and experience in the techniques of animal surgery and vascular pathophysiology. Send curriculum vitae and the names of three references to: Dr. Aviv Hassid, Department of Physiology and Biophysics, The University of Tennessee, 894 Union Avenue, Memphis, TN 38163. E-mail: ahassid@physiol.utmem.edu; FAX: 901-448-7126.

The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ ADEA Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE YALE UNIVERSITY SCHOOL OF MEDICINE

Positions available to study molecular mechanisms of (a) cellular resistance to antineoplastic agents and (b) cellular differentiation. Applicants must have a Ph.D. or M.D.-Ph.D. Experience in cell or molecular biology and/ or cancer research preferred. Send curriculum vitae and have three letters of recommendation sent to: Dr. Alan C. Sartorelli, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520-8066. FAX: 203-737-2045. Yale University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Positions available in a multidisciplinary training program to study nitric oxide signaling mechanisms in vascular smooth muscle in response to exercise. Biochemical, molecular biological, and physiological approaches used with opportunities to design unique training program based on previous experiences. Please address inquiries to: James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. Telephone: 214-648-6849; FAX: 214-648-2974; e-mail: jstull@mednet.swmed.edu. An Affimative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION. Orphan receptors/behavioral analysis, Prof. O. Civelli, University of California, Irvine. Details: website: www.eod.uci.edu/eod-bin/ad, College of Medicine; e-mail: ocivelli@uci.edu. Close date: July 14, 1998.

POSTDOCTORAL POSITION CHILDREN'S HOSPITAL OF PHILADELPHIA

A position is available immediately to study the molecular genetic control of the extracellular matrix in cardiovascular development and disease. The main projects in the laboratory focus on cardiac valve disorders, molecular mechanisms of cardiac arrhythmias, and gene delivery systems.

Experience in molecular biology, protein and nucleic acid biochemistry, signal transduction, and cell culture is helpful. All strong candidates will be considered.

Please send a curriculum vitae, summary of research interest, and the names of three references to: Robert J. Levy, M.D. The Children's Hospital of Philadelphia

Abramson Pediatric Research Center—1107 34th and Civic Center Boulevard Philadelphia, PA 19104-4399 FAX: 215-590-5454 E-mail: levyr@email.chop.edu

The Children's Hospital of Philadelphia is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Positions available in a multidisciplinary training program to study $Ca^{2+}/calmodulin-dependent myosin$ light chain kinase and myosin phosphorylation insmooth muscle contractility and nonmuscle cell motility. Biophysical, biochemical, cell biology, molecular genetics, and muscle physiology techniques are used toexamine the regulation and functions of these proteinsin relation to second messenger pathways. Opportunityto design unique training program based on previousexperience. Please address inquiries to: James T. Stull,Ph.D., Department of Physiology, The University ofTexas Southwestern Medical Center at Dallas, 5323Harry Hines Boulevard, Dallas, TX 75235-9040.Telephone: 214-648-6849; FAX: 214-648-2974; email: jstull@mednet.swmed.edu. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the role of lipid mediators in the process of corneal inflammation and wound healing. Projects involve characterization of the functions of several lipids, such as interaction with transcription factors modulating the action of enzymes involved in the remodeling of the extracellular matrix and investigating signal transduction cascades involving Src kinases and their role in cytoskeletal reorganization. Experience in molecular biology, cell culture, and biochemistry required. Send curriculum vitae and hames of references to: Dr. Haydee E. P. Bazan, Louisiana State University Eye Center and Neuroscience Center, 2020 Gravier Street, Suite D, New Orleans, LA 70112. Telephone: 504-599-0877; FAX: 504-568-5801; e-mail: hbazan1@sumc.edu.

POSTDOCTORAL SCIENTIST to investigate cytokine-receptor recognition, mimetics, and signal triggering. Background in one or more of protein chemistry, molecular biology, protein expression, biophysics, structural biology. Evidence of interest in macromolecular recognition mechanisms at the quantitative/structural level a plus. Funding available 1 July 1998. Résumés and names, telephone, FAX, and e-mail for three references to: Irwin Chaiken, Ph.D., University of Pennsylvania School of Medicine, 913 Stellar Chance Laboratories, 422 Curie Drive, Philadelphia, PA 19104. FAX: 215-349-5572; e-mail: chaiken@mail.med.upenn.edu.

POSTDOCTORAL RESEARCH into tumor oxygenation using ¹⁹F MR EPI. Candidate should have strong background in tumor biology with keen interest to learn magnetic resonance techniques. Available immediately for two years; salary \$26,000. Contact: Ralph Mason, Department of Radiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9058. E-mail: mason01@utsw.swmed.edu. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION RETROVIRAL REPLICATION UNIVERSITY OF WASHINGTON

Study reverse transcription by retroviruses with a focus on the roles of RNase H and the mechanism of strand displacement synthesis. Emphasis will be on the elucidation of structure-function relationships as they apply to catalvsis and enzyme specificity. Methodologies include standard cloning techniques, PCR, site-directed mutagenesis, protein expression and purification, macromolecular crosslinking, footprinting, enzyme kinetics, and gel analyses. Position available immediately, but applications will be accepted until the position is filled. Please send curriculum vitae, a brief statement of prior research experience, and the names of three references to: Dr. James J. Champoux, Department of Microbiology, Box 357242, University of Washington, Seattle, WA 98195. The University of Washington is an Affimative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITIONS SIGNAL TRANSDUCTION Massachusetts General Hospital/ Harvard Medical School

Three Postdoctoral positions are available immediately to study stress and cytokine signal transduction mechanisms (*Nature* 369:156, 1994; *JBC* 269:26546, 1994; *Nature* 377:750, 1995; *JBC* 272:13229, 1997). Candidates should have a Ph.D. or equivalent, and no more than two years of postdoctoral training. Experience in biochemistry and molecular biology are required. Send curriculum vitae, statement of research interests, and three reference letters to: John M. Kyriakis, Ph.D., Diabetes Research Laboratory, Massachusetts General Hospital East, 149 13th Street, Charlestown, MA 02129. E-mail: kyriakis@helix.mgh.harvard.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION

Position available to study the protective effects of antioxidant transgenes in diabetes. Separate transgenic models have been established for protection of the heart from diabetic cardiomyopathy and protection of the pancreatic beta cell from free radical damage. Additional transgenic models will be produced. Please send curriculum vitae and names of three references to: Dr. Paul N. Epstein, Department of Pharmacology and Toxicology, University of North Dakota School of Medicine and Health Sciences, P.O. Box 9037, Grand Forks, ND 58202-9037. The University of North Dakota is an Equal Opportunity Employer.





STUDENT SUPPORT OPPORTUNITIES SOCIETY FOR INTEGRATIVE AND COMPARATIVE BIOLOGY

Students and postdoctorates are an important part of the Society for Integrative and Comparative Biology (SICB) Annual Meeting, to be held January 6–10, 1999, in Denver, Colorado. SICB will provide housing and registration support to students and postdoctorates presenting a paper or poster at the 1999 SICB Annual Meeting. In exchange, students and postdoctorates are required to work half-day at the meeting. Abstract deadline is August 14, 1998. For more infor-

Abstract deadline is August 14, 1998. For more information, contact: **Telephone: 312-527-6697, 800-955-1236** (option 3) or visit the SICB website: http:// www.sicb.org.

GLOBAL OPPORTUNITIES

Hazeva Research and Development Center (J. Blaustein Institute for Desert Research, Sde Boker, Ben-Gurion University, Israel) has two openings for PH.D'S interested in research and development in dry land agriculture, dry land natural resource management, or dry land ecology. Details: Dr. Ilan Yarom, Hatzeva Research and Development Center, c/o Hatzeva Field School, 86815 Israel. Telephone: 972-7-6581641; FAX: 9972-7-5682068; e-mail: iyarom@bgumail. bgu.ac.il. Deadline: July 30, 1998.

COURSES & TRAINING

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

The National Institutes of Health has both! For more information, visit our website, which lists an array of clinical and postdoctoral opportunities, including tenure-track positions. To learn more, search: http://www.training.nih.gov

ANNOUNCEMENT

HUMAN LIVER FOR SCIENTIFIC INVESTIGATION National Institute of Diabetes and Digestive and Kidney Diseases

The Liver Tissue Procurement and Distribution System (LTPADS) is a National Institute of Health (NIH) service contract to provide human liver from regional centers for distribution to Scientific Investigators throughout the United States. These USA regional centers have active liver transplant programs with human subjects' approval to provide portions of the resected pathologic liver for which the transplant is performed. Frozen or fresh tissue is available from subcontractors for the usual forms of childhood and adult cirrhosis, fulminant liver failure, chronic rejection, and certain inborn errors of metabolism. Human pathologic liver prepared according to the Investigator's specifications provides the opportunity to verify if animal liver investigations are relevant to human liver pathophysiology. The preparation of these livers has been excellent for the usual molecular biologic techniques for the past 10 years. "Normal" liver specimens may be requested; however, the supply is appropriately much more limited and completion of proposal requests take a longer time than for most pathologic liver specimens.

A new service is in the planning stage to provide isolated liver cells; thus we encourage new proposals requesting hepatocytes from "normal" and/or pathologic human liver obtained at the time of transplantation. A limited supply of ervopreserved pathologic hepatocytes are available. NIH Investigators are always given preference for requests. Supporting letters for NIH new or renewal grant requests can be provided.

Please direct all inquiries for information, proposal forms, and requests for supporting letters to the address below:

Harvey L. Sharp, M.D., Principal Investigator Liver Tissue Procurement and Distribution System Fairview University Medical Center 420 Delaware Street S.E.

420 Delaware Street S.E. Minneapolis, MN 55455 Telephone: 612-624-1133 FAX: 612-626-0639

Website: www.peds.umn.edu/Centers/Itpads/







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Human GENEFILTERS[™] Release II Now Available

Research Genetics is pleased to announce that Release II of our Human GeneFiltersTM is now available. GENEFILTERSTM are high density DNA arrays produced on membranes. These membranes offer the opportunity to carry out sophisticated, genome-wide gene expression experiments using simple autoradiography with or without phosphor-imaging equipment and, if care is taken, can be re-probed up to five times. Standard hybridization methods with ³²P or ³³P produce data which can be analyzed by hand or by using PathwaysTM, our image analysis software. Release I of



our human GENEFILTERSTM consists of DNA from 5,184 unique, sequence validated, I.M.A.G.E./LLNL¹ clones chosen from the Unigene set². These clones represent over 2,200 known genes and approximately 3,000 ESTs from genes of unknown function. The Release II filter contains DNA from another 5,184 clones. The clones on Release II represent over 1,100 known genes. For a list of genes spotted onto the filters and protocols, please see our web site at http://www.resgen.com.



PathwaysTM software is a Windows95/Windows NT analysis tool that, when used in conjunction with GENEFILTERSTM, allows for the analysis and comparison of gene expression. This comprehensive software opens new avenues of research involving whole genome collections of genes or subsets thereof. Unlike two-color fluorescent methods, this approach allows analysis of a single experiment, not just a comparison of two separate experiments. Normalization allows the comparison of multiple experiments while the report generator uses a sophisticated histogram tool to allow data sets to be selected, based on expression or relative expression profiles. A built-in database facilitates archiving of both raw images and fitted data and allows for the biological information related to a data point to be integrated in the software.

Cat. No.	Description	Price
GF200	Human GENEFILTERS TM Release I	\$ 960.00
GF201	Human GENEFILTERS TM Release II	\$ 960.00
PW200	Human Pathways [™] Version 1.0	\$2,850.00

Ref
 1. Lennon, G., Auffray, C., Polymeropoulos, M., Soares, M.B. (1996) *Genomics* 33, 151-152.
 2. http://www.ncbi.nlm.nih.gov/UniGene/index.html
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