INSTRUMENTATION, APPARATUS, AND LABORATORY MATERIALS

NEW PRODUCTS

RETROVIRAL EXPRESSION SYSTEM

The Pantropic Retroviral Expression System can be used to stably introduce recombinant DNA into mitotically dividing cells from a wide range of mammalian and nonmammalian hosts. This versatility makes

CLONTECH For more information call 800-662-2566 or circle 146 on the Reader Service Card the system a valuable tool for studying gene function and establishing transgenic organisms. The Pantropic System features a nonreceptor-based envelope protein, VSV-G, that

mediates viral entry through lipid binding and plasma membrane fusion, a process that allows foreign genes to be delivered into a wide variety of hosts—even into cell lines that are difficult to transduce.

RNA ISOLATION

The RNAqueous-4PCR Kit isolates RNA without genomic DNA contamination from samples as small as 1 mg or 100 cells. The rapid, phenol-free isolation procedure yields

total RNA that is treated with DNase in an optimized reaction buffer. The DNase and divalent cations are removed with a novel, nontoxic DNase removal reagent, providing total RNA ready for

Ambion For more information call 800-888-8804 or circle 147 on the Reader Service Card

reverse transcriptase–polymerase chain reaction (RT-PCR) analysis. The kit is designed for both traditional endpoint RT-PCR analysis and real-time PCR applications.

STRIP TUBES AND CENTRIFUGE ROTORS

The EZ-8 strip tube, a unique replacement for standard 1.5-ml microcentrifuge tubes, consists of eight tubes connected in a strip format that is compatible with standard multichannel pipettes. A one-piece, hinged

Labnet For more information call 888-LABNET1 or circle 148 on the Reader Service Card cap seals all eight tubes individually and opens and closes easily. The surface of the cap provides a large writing surface for sample identification. Suitable for mini-preps, extractions, and other

procedures that involve multiple samples, the EZ-8 strip tubes increase efficiency and reduce the time required for processing samples. All tasks that would normally be performed for each tube—capping, uncapping, labeling, adding reagents, and loading into a centrifuge rotor, now require only one action for each set of eight tubes. The EZ-8 strip tubes can be centrifuged in a variety of Hermle/Labnet microcentrifuges using the EZ-8 strip tube rotor. Each rotor has the capacity for four strip tubes.

BACTERIAL DNA ISOLATION

Bactozol is an innovative kit for the isolation of DNA from a broad spectrum of gram-negative and gram-positive bacteria.

A key component of the kit is Bactozyme, a concentrated solution designed for effective lysis of bacterial cell walls, which contains activated lysozyme that remains stable at room temperature and precludes the need for dai-

Molecular Research Center For more information call 888-841-0900 or circle 149

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ly enzyme preparation. The other key component of the kit is DNAzol, which provides a fast method for isolation of DNA from the bacterial lysate after cell lysis.

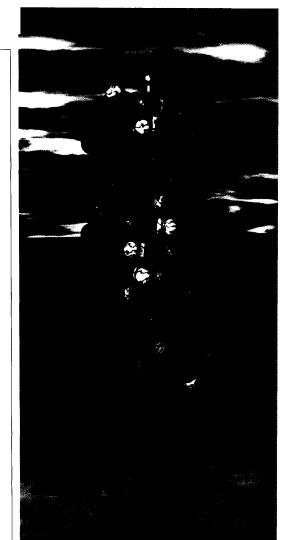
LITERATURE

PixelFly High Performance Digital CCD Camera System is a brochure on a 12-bit camera that can deliver speeds up to 140 frames per second. The unit's miniature head can easily connect to a standard or compact PCI board via a high-speed serial data link. The PCI boards include a front-end processor

Cooke Corp. For more information call 248-276-8820 or circle 150 on the Reader Service Card that can handle task controls and provide opto-isolated triggers. A download feature of the processor via the PCI bus adds to the versatility of the system. All camera functions are remotely

controlled via a digital interface. The instrument's application range includes high-resolution microscopy, spray imaging, bioluminescence, ion imaging, green fluorescent protein, spectroscopy, ballistics, particle image velocimetry, medical x-ray imaging, and low-light-level imaging.

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



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POSITIONS OPEN

INVESTIGATOR MICROBIAL BIOCHEMISTRY

SmithKline Beecham, an international producer of pharmaceuticals and consumer health care products, is seeking an individual with a background in molecular biological and microbial biochemical antibacterial research to serve as Investigator at its research and development facility in Collegeville, Pennsylvania. Principal duties include: conceive, plan, initiate, and direct molecular biological and microbial biochemical antibacterial research, particularly in the area of nucleotide phosphorylation, proteases, and cell envelopeanchoring pathways, with the aim of identifying new compounds that inhibit bacterial targets.

Minimum requirements are a Ph.D. in microbial biochemistry or molecular biology and three years of experience in the job offered or three years of experience in microbial biochemical and molecular biological antibacterial research, which shall include experience in (1) analyzing proprietary and public DNA and protein databases using computer software programs such as GSG and Lasergene; (2) cloning and expressing DNA sequences encoding potential antibacterial targets; (3) preparing bacterial cell extracts from gram-positive and gram-negative bacteria; (4) utilizing molecular biological and protein biochemical methods and techniques including PCR, RT-PCR, agarose gel electrophoresis, DNA extraction, purification, ligation, cell fractionation, transformation, and sequencing; (5) utilizing FPLC, protein concentra-tion, and freeze-drying to purify overexpressed proteins; (6) utilizing polyacrylamide gel electrophoresis, Western blotting, limited proteolysis, mass spectros-copy (Seldi M/S), GC, HPLC, and steady-state enzymology to characterize purified proteins; (7) designing and implementing in vitro assays including fluorescence, luminescence, radioactive, and spectroscopic-based assays suitable as high-throughput screens in microtiter plate format.

SmithKline Beecham offers a competitive compensation/benefits package. For confidential consideration, please forward résumé and salary requirements to: Dr. John Lonsdale, Assistant Director, Anti-Infectives, SmithKline Beecham Pharmaceuticals, P.O. Box 5089, UP1345, Collegeville, PA 19426-9901. We are an Equal Opportunity Employer; Minorities/ Females/Disabled/Veterans.

TENURE-TRACK POSITION. A Ph.D. and postdoctorate in neuroscience and expertise in electrophysiology required. The successful candidate will work in an environment rich in primate systems neuroscience and will be expected to establish an independent line of extramurally funded research in CNS function related to somatic sensory function, thermal, or pain sensation. In addition, this individual will supervise Fellows to carry out single neuron recordings in the human CNS in the operating room and to analyze these recordings in an established laboratory. Applicants should send curriculum vitae; a description of research interests; and the names, addresses, and telephone numbers of three individuals from whom reference letters can be obtained to: F. A. Lenz, Meyer 7-113, Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21287-7713. E-mail: fal@pallidum.med.jhu.edu.

UNIVERSITY OF FLORIDA

Seeks two CLINICAL ASSISTANT/CLINI-CAL ASSOCIATE PROFESSOR positions for the Department of Medicine, Division of Internal Medicine. M.D. degree; Board certified/Board eligible in internal medicine; 1.00 full-time employment nontenure-accruing position. The responsibilities will consist of treating patients on an outpatient and inpatient basis. Teaching medical students and residents coinciding with the care of those patients; no research responsibilities. Salary and benefits commensurate with experience. Recruiting deadline: June 21, 2000. Anticipated starting date: July 1, 2000. Please reply with curriculum vitae to: Richard Davidson, M.D., Associate Professor, Box 100277 JHMHC, Gainesville, FL 32610. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR, SKIDAWAY INSTITUTE OF OCEANOGRAPHY

The Skidaway Institute of Oceanography, an independent research unit of the University System of Georgia, seeks a dynamic leader to fill the position of Director. The successful candidate will be an internationally recognized scientist with an outstanding record of research accomplishments within the broadly defined field of marine science.

The Director will lead the Institute in the development and expansion of research and instructional programs and will support Institute operations through fund-raising and administrative activities. The Director coordinates the activities of a permanent research faculty and staff of approximately 80 and helps provide research opportunities and access to marine environments for over 20 other faculty members and a large number of graduate students from throughout the university system of Georgia. The Skidaway Institute of Oceanography is located on Skidaway Island, about 18 miles south of downtown Savannah by road. Details of staff and facilities may be viewed at **website:** http://www.skio.peachnet.edu.

Applicants and nominees must have demonstrated success in administration, a history of attracting funding from external agencies and foundations, and an established track record of developing collaborative institutional relationships.

Candidates should submit curriculum vitae with complete bibliography, funding history, and a detailed statement of research and leadership accomplishments to:

Mr. Richard Knowlton Chair of the Director's Search Committee Skidaway Institute of Oceanography 10 Ocean Science Circle Savannah, GA 31411 U.S.A. E-mail: search@skio.peachnet.edu

Review of applicants and nominees will begin immediately and will continue until the position is filled. The Skidaway Institute of Oceangraphy is an Equal Opportunity/Affirmative Action Employer.

PHYSIOLOGIST/BIOLOGIST FACULTY POSITION

The Department of Physiology at the University of Texas Health Science Center at San Antonio is seeking a Physiologist/Biologist with a strong background in physiological genomics and experience in microarray technology. Applications are being accepted for a tenure-track position at a level commensurate with the successful applicant's qualifications. The position requires the establishment of a strong research program and the teaching of graduate and professional students. The current research interests of our faculty include cardiovascular and aging as well as lung and bone biology. Send four copies of curriculum vitae and three names of references to: Dr. Roger McCarter, Department of Physiology-MC7756, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900. E-mail: mccarter@uthscsa. edu. The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE: natural products chemistry. A nontenure-track faculty position is available 1 October 2000 to identify natural products of fungal endophyte-infected turf grasses that may be involved in insect, disease, and environmental stress resistance. Candidates should have a Ph.D. in natural product chemistry and three years of relevant postdoctoral research. Experience isolating and culturing microorganisms associated with plants is required. Salary is \$35,000. Send curriculum vitae and three letters of recommendation to: Dr. Thomas Gianfagna, Plant Science Department, Rutgers University, 59 Dudley Road, New Brunswick, NJ 08901-8520. For additional information, e-mail: gianfagna@aesop. rutgers.edu. Rutgers-the State University of New Jersey is an Equal Opportunity/Affirmative Action Employer.

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MAYO CLINIC Director of Research Computing Facility

The Mayo Clinic in Rochester, Minnesota (http://www.mayo.edu) is seeking a Director of its Research Computing Facility. The Research Computing Facility (RCF) (http://www.mayo.edu/research/ref) is a highly prized core component of the Mayo Clinic research infrastructure that provides information technology services to the diverse Mayo research community. The 25 members of the RCF staff collaborate with approximately 500 career scientists and clinicians actively engaged in research and interact with the larger Information Technology group that supports foundation-wide computing. The Director is expected to provide leadership in formulating strategic planning initiatives for information technology applied to research with a strong focus on informatics related to biological and medical information. The plethora of available biological and medical data requires the integration of computing with research experimentation. Informatics support is vital to scientists and physicians in order to "visualize" their data and compare it with genomic, structural, and literature information. The ideal RCF director will be a visionary with considerable current knowledge of computer technology (hardware and software), web development, informatics, as well as genomics and biology. The Director must also be a proven leader and manager, with excellent skills in organization and budgeting, as well as a demonstrated appreciation for the importance of customer service in a research environment. A capacity to communicate and work effectively with research staff and senior administration is essential. This is a full time professional position with a competitive compensation and benefits package.

The Mayo Clinic is located in Rochester, Minnesota (http://www.rochesterusa.com), approximately an hour from the Minnesota/St. Paul metropolitan area. Rochester has excellent schools, a cosmopolitan cultural atmosphere, growing economy, clean environment, and has been rated one of the best places to live in the USA by Money Magazine.

Candidates should have a Ph.D. in Computer Science, Bioinformatics, Computational Biology, or a closely aligned quantitative science, with significant professional experience in management and leadership in a research or clinical environment, as well as demonstrated knowledge of technological advancements. Applications will be accepted until the position is filled, but preference will be given to applications received by May 31, 2000. Potential applicants for this position should submit a cover letter expressing their interest and qualifications, their curriculum vitae or resume and three letters of recommendation to:

Daniel J. Schaid, Ph.D., Chair, RCF Director Search Committee Harwick 7 Mayo Clinic 200 First Street SW Rochester, MN 55905 E-mail: schaid@mayo.edu Fax: (507) 284-9542

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Postdoctoral Position

Unique Postdoctoral opportunity at Boston University School of Medicine (BUSM), Department of Biochemistry, Immediate opening for recent Ph.D. in the biomedical sciences interested in teaching an innovative biotechnology curriculum to pre-college students from grades 7-12 and helping implement community based adult programs related to our medical school outreach efforts. Experience is not required but applicants must be willing to learn and participate in developing new and unusual approaches to teaching K-12 bioscience. Applicants who complete the program will have acquired excellent teaching and communication skills and be capable of designing new teaching tools for a variety of biomedical applications. They will be well qualified for industrial teaching positions related to employee and/or customer training as well as academic teaching positions at the college and pre-college level. A minimum 2-year commitment is required.

You can e-mail your application or inquiries to franzbla@bu.edu or mail your application to:

Dr. C. Franzblau Department of Biochemistry Boston University School of Medicine 715 Albany Street Boston, MA 02118

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BIOCHEMIST/MOLECULAR BIOLOGIST

Merck Research Laboratories has an opening for a biochemist or molecular biologist in the Centro de InvestigaciUn B-sica de EspaDa (CIBE, Madrid, Spain) of its Natural Products Drug Discovery area.

The candidate will be responsible for the adaptation and validation of biological assays to HTS environment, the screening of natural products libraries, and, when required, the assay support for the chemical isolation of the active compound(s) present in the active extracts. He/she will have direct responsibility for a variety of assays, and will supervise the work of a team of scientists and technicians.

The qualified candidate must have a Ph.D. in biochemistry or molecular biology with at least 5 years of postdoctoral experience and substantial experience in the field of drug discovery. Good general knowledge of screening technologies (SPA, HTRF, FRET, ELISA) and of state-of-the-art targets for drug discovery in areas such as endocrinology, neurological disorders or inflammation is necessary. Good ability to work as part of a team is required. The candidate should be perfectly fluent in English and have computer/data management skills. Knowledge of Spanish is preferred.

Candidates can submit their CVs by email to fernando_pelaez@merck.com or to the following address: Fernando Pel-ez, Centro de InvestigaciÚn B-sica, Merck, Sharp & Dohme de EspaDa, S.A., Josefa Valc-rcel 38, E-28027 Madrid, Spain.

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HEAD OF INDOOR ENVIRONMENT DEPARTMENT

Lawrence Berkeley National Laboratory (LBNL) is a Department of Energy multipurpose national laboratory managed by the University of California. We are located in the hills overlooking the campus of the University of California at Berkeley. Scientific and technical leadership, along with accomplished scholarship, is a key to success here. LBNL is associated with 9 Nobel Prize laureates, whose research continues to influence our goal of scientific excellence.

We are looking for a scientific leader to step into the role of Department Head of the Indoor Environment Department (IED). IED operates within the Environmental Energy Technologies Division, which is responsible for more than 10% of the overall research undertaken at LBNL. The division's research focuses on energy efficiency and related environmental issues. It consists of five departments: Building Technologies, Energy Analysis, Indoor Environment, Advanced Energy Technologies, and Atmospheric Processes.

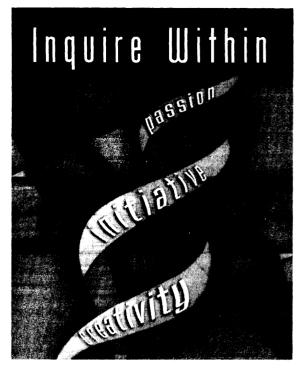
Responsibilities: As Indoor Environment Department Head, you will be in charge of about 55 staff and an annual \$6 million budget. IED conducts research on indoor environmental quality; exposure and risk; health; indoor air and pollutant transport and chemistry; building heating, ventilating, and air conditioning; and building energy performance. The Department Head provides scientific leadership, develops and implements strategies to maintain and strengthen the Department's research, assures research quality, fosters an environment that supports staff development, raises research funds, provides administrative and financial oversight, and manages the Department. The Department Head is also expected to develop and manage research projects.

Oualifications: You should have an international reputation as a leader in indoor-environmental research, or in a closely related field, and have a record of scientific excellence. Your record should also demonstrate excellence in managing substantial research activities and a strong commitment to the development of junior staff. We are looking for an individual with a broad, interdisciplinary perspective that could include chemistry, applied physics, engineering, health sciences, building technology, or environment science. We seek a scientist with an appreciation of the relevance of research on indoor environment to society. We are interested in a person who can work with others to create a broad vision for the Department and invest substantial energy into the achievement of the vision. Familiarity with federally funded research programs, particularly those of the US Department of Energy, is highly desirable. An advanced degree in science or engineering is expected.

To Apply: Applicants should submit their curriculum vitae, a statement of interest, copies of up to three publications, and a list of five references to Professor William Nazaroff, Chair of IED Head Search Committee, c/o S.L.Harding, Lawrence Berkeley National Laboratory, One Cyclotron Road, MS 90-1127, Berkeley, CA 94720. Review of applications will begin on August 15. The search will remain open until the position is filled. Visit our website at http://eetd.lbl.gov/ied.html Berkeley Lab is an AA/EEO Employer.



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Research Associate/ Sr. Research Associate

We are seeking a highly motivated Associate for our Molecular Oncology Department to focus on the regulation of angiogenesis by VEGF and novel mediators. You'll contribute on the research team investigating molecular mechanisms of tumor angiogenesis, and be involved in the cloning of novel genes and *in vitro* bioassays. You'll need a BA/BS and MS in a biological discipline, with strong skills in molecular/cellular biology and 3+ years of laboratory experience. Job Code 2147-SCI

Associate Scientist/Scientist

We need a Scientist to lead a team in our Analytical Chemistry Department to conduct research and development for the characterization of recombinant DNA-derived polypeptides, proteins and glycoproteins. You will develop and apply analytical methodologies utilizing surface plasmon resonance technology, while solving problems related to product characterization using a variety of analytical techniques. Candidates must have a PhD in Chemistry or Biochemistry and experience in surface plasmon resonance instrumentation. A strong background in analytical biochemistry, chemical and biochemical kinetics and/or physical chemistry with a proven record of good laboratory practice and 2+ years of postdoctoral study are essential. Excellent communication skills and the capability to lead a fast-paced multidisciplinary team are desirable. Job Code 2141-SCI

Scientist

The Department of Pharmacokinetics and Metabolism, an exciting and growing department at Genentech, needs a Scientist to investigate the basic pharmacology and biology of novel therapeutics in immunology, endocrinology and other related fields. You will design and implement experiments to understand mechanism of action, disposition and efficacy of protein-based therapeutics. Responsibilities include managing an active research laboratory while supporting developing projects and regulatory findings. You must have a PhD in Immunology, Biology or Pharmacology with 2 + years industrial or postdoctoral experience and a background in planning, organizing and analyzing experimental data. Skills in cell biology, animal pharmacology and biochemistry, and the ability to multiask and work with a team are essential. Job Code 2122-SCI

Scientist

The Oncology Focus Area within the Department of Pharmcokinetics and Metabolism needs a Cancer Biologist with experience in anti-angiogenesis and apoptosis or antibody therapeutics. You will establish a laboratory to investigate the mechanism of action of candidate therapeutics for identification of pharmacodynamic markers for use in clinical studies. An understanding of the drug development process and the ability to partner in clinical and research are critical. Candidates must have an MD and/or PhD with 2+ years of postdoctoral or postgraduate experience. A strong record of publication in peer-reviewed journals, excellent communication skills and familiarity with methodology and technology are musts. The level of this position is dependent on experience/qualifications. Job Code 2083-8CI

Scientist/Sr. Scientist

Genentech is looking for a Scientist for our Department of Toxicology. You will independently prepare comprehensive pre-clinical plans and evaluations to support clinical development of drug candidates and defend findings to regulatory authorities. Additional responsibilities include designing, conducting and evaluating safety assessment studies, investigating novel mechanisms of toxicity and providing expertise on safety issues involving protein and chemical therapeutics. Qualified candidates must have a PhD or equivalent in Toxicology with 2+ years experience in the pharmaceutical/biotechnology industry. Expertise in one or more of the following is desired: immunology, endocrinology, cardiovascular pharmacology, molecular biology or oncology with board certification in toxicology. Job Code 1050-SCI

Sr. Research Associate/ Associate Scientist

This position will manage a DNA sequencing group, providing expertise, project supervision and sequencing support for research departments. You must have a PhD or MS in Biochemistry, Biology or Molecular Biology with 5+ years experience, as well as experience in personnel and project management, DNA sequencing, molecular biology techniques, DNA manipulation and DNA sequence analysis software (including Sequencher) and UNIX operating system. Experience with the AB1373A, AB1377 or AS13700 DNA sequencers is also a must, lob Code 2121-SCI

Research Assistant/Research Associate

Candidates will utilize their experience and understanding of protein purification and characterization techniques to support the development and implementation of recombinant protein processes from lab to manufacturing scale. Responsibilities include purification design, optimization, protein characterization and recovery technology development. You will perform experiments, collect and analyze data and provide supporting technical reports. Ideally, you will have excellent communication and problem solving skills combined with the capability to interact in a team environment. A BS in Biochemistry, Biology, Chemical Engineering or related discipline is also needed, as is experience in protein characterization techniques (HPLC, SDS-PAGE, ELISA), GMP/GLP, large-scale purification, and chromatography. Familiarity with laboratory instrumentation, including computer controlled instruments, is desirable. Job Code 2097-SCI

Scientist

We are seeking skilled Scientists in the Pharmacokinetics and Pharmacodynamics fields to contribute to all phases of drug development ranging from preclinical pharmacokinetics and metabolism to clinical pharmacology. You will participate on project teams, write regulatory documents, and contribute to cross-departmental collaborations. You will pursue novel techniques or technologies for the advancement of pharmacological sciences to utilize the opportunity for publication of scientific accomplishments and contributions. To qualify, you must have a PhD in Pharmacokinetics or related discipline, 5-7 years of relevant experience and a strong scientific record. Knowledge of drug development and regulatory filing is beneficial. Job Code 0923-SCI

To apply for these positions, please email your resume, indicating Job Code, to genentechad@webhirerpc.com (place Job Code in the subject field, ASCII files only with a maximum line width of 76 characters). Or mail to Genentech, Inc., Attn: Human Resources, PO Box 1950, South San Francisco, CA 94083-1950, fax (650) 225-2371. Genentech is an Equal Opportunity Employer.

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Sitlington Endowed Chair in Infectious Diseases

The College of Veterinary Medicine, Oklahoma State University requests applications and nominations for the Sitlington Endowed Chair in Infectious Diseases. This Chair carries an endowment of \$3 million for the continuation and development of the Chair's research program. The appointee should develop and sustain a specific research program in infectious disease, including molecular aspects of infection, which complements existing research including viral and bacterial pathogenesis, bacterial/viral genomics, pathogen-host interaction, host immunity, and vaccinology. The research area is open to the interest and expertise of the candidate. The College has a distinguished and active research program committed to infectious diseases of animals and humans. Newly remodeled BSL-2 and BSL-3 laboratories and generous start-up or relocation support are available for the successful candidate. The College and University have excellent research support facilities including flow cytometry; electron microscopy; microbial fermentation; animal care facilities for biocontainment housing of research animals including laboratory and food animals; and excellent molecular biology support facilities including nucleic acid and protein sequencing and synthesis, hybridoma services, mass spectroscopy, NMR, and state-of-the-art DNA technology. Other responsibilities include graduate student and postdoctoral training, plus collaborative research with other faculty. Qualifications for the Chair include an earned PhD, DVM or MD degree and a proven record of current research productivity, and sustained competitive support from NIH, DoD, or other federal agencies. Appointment will be at the associate or full professorial rank, and salary will be competitive for such positions.

Nominations and applications by interested applicants should include a CV, a description of the research program and plans for further program development, and the names and addresses of five references and should be sent to:

Dr. Robert Fulton, Professor and Chair Search Committee for the Sitlington Endowed Chair in Infectious Diseases Department of Veterinary Pathobiology 250 Veterinary Medicine Oklahoma State University Stillwater, OK 74078

Review of applications will begin September 15, 2000 and will continue until a suitable candidate is identified. College information is available at www.cvm.okstate.edu and inquiries can be made at 405-744-8170 to Dr. Fulton.

Oklahoma State University is an AA/EOE.

Ready to make a difference?

Karo Bio USA, formerly known as Novalon Pharmaceutical Corporation, is the US-based subsidiary of Karo Bio AB, a Swedish biotechnology company. We specialize in drug discovery and emerging technologies that accelerate lead identification. Karo Bio USA utilizes peptides as surrogate ligands to develop highthroughput screens for a wide range of novel targets including nuclear receptors and G proteincoupled receptors.

We are expanding our operations and currently have openings for the following positions:

Senior Scientist, Nuclear Receptors

Ph.D. in Cell and Molecular Biology/Biochemistry with 3-5 years postdoctoral experience in Nuclear Receptor Biology. Additional experience in protein expression, gene manipulation and cell-based assays is expected. Refer to Job Code NR.

Senior Scientist, G Protein-Coupled Receptors

Ph.D. in Cell and Molecular Biology/Biochemistry with 3-5 years postdoctoral experience in GPCR or cell-signaling pathways. Additional experience in cell-based assays, gene manipulation and protein manipulation is expected. Refer to Job Code GPCR.

Competitive salary and benefits package. Please submit your resume with cover letter, specifying job code, to:

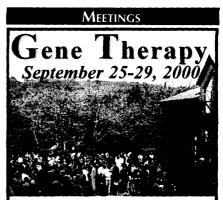
Karo Bio USA

4222 Emperor Blvd., Suite 560 Durham, NC 27703-8466 E-mail: jobs@novalon.com (Please paste/type in resume first, with cover letter at end—file attachments WILL NOT be accepted.)

No phone solicitations or faxes, please. An equal opportunity employer.

For more information about Karo Bio, please visit our Web sites: www.novalon.com and www.karobio.com.





Organized by: Jeffrey Leiden (Harvard U.) Margaret Liu (Lafayette CA) Gary Nabel (NIH) James Wilson (U. Pennsylvania)

Session Topics:

• Viral Vector Development & Regulation of Gene Expression

• Disease Models I - Hematopoiesis, Hemophilia & Muscle Disorders

 Immunity and Gene Transfer
 Genetic Approaches & Immunotherapy for Cancer & Angiogenesis

 Gene Therapy for AIDS & Vaccination Approaches to Infectious Diseases

 Disease models II - Neurological, Metabolic & Cardiovascular

New Technology, Stem Cells
 & Tissue Engineering

Special Panel Discussion: Clinical Trials Design, Data Safety Monitoring & Bioethics

Speakers: Michael Blaese, Malcolm Brenner, Jeffrey Bonadio, Hermann Bujard, Marina Cavazzana, Olivier Danos, Raphael Dolin, Judah Folkman, Theodore Friedmann, Fred Gage, Katherine High, Ronald Levy, Jay Siegel, Bruce Sullenger, Didier Trono Inder Verma, Savio Woo, John Young, Kathryn Zoon

Oral and poster presentations will be selected on the basis of scientific merit. CSHL encourages junior scientists to present their data at the meeting. Please register and submit abstracts online.

Abstract Deadline: July 5

Other CSHL Fall Meetings

Cancer Genetics & Tumor Suppressor Gen	Aug 16 - 20
Molecular Genetics of Bacteria & Phages	Aug 22 - 27
Mouse Molecular Genetics	Aug 30 - Sep 3
Translational Control	Sep 6 - 10
Dynamic Organization of Nuclear Function	Sep 13 - 17
Axon Guidance & Neural Plasticity	Sep 20 - 24
Germ Cells	<i>Oct 5 - 8</i>
Human Origins	Oct 25 - 29

Cold Spring Harbor Laboratory

Meetings & Courses, 1 Bungtown Rd, Cold Spring Harbor, NY 11724 Email: meetings'a cshl.org Fax: 516-3678845 Phone: 516-3678346 www.cshl.org/meetings/



Process and Product Development is the sciencebased group solely responsible for the invention, initial implementation, and scientific support of commercial production processes for all biopharmaceutical proteins at Genetics Institute. The group is principally comprised of biologists, biochemists, chemical engineers, and pharmaceutical scientists, with additional expert support staff in areas of technical services. clinical manufacturing, and quality assurance. The breadth of expertise and responsibility spans host cell transfection for production expression, cell culture and fermentation. downstream purification. protein formulation and delivery. protein characterization and analysis, and clinical manufacturing, including quality and regulatory oversight. The group also directly supports **Commercial Manufacturing** through process transfer and scale-up, and ongoing process troubleshooting.

For information

on other exciting job opportunities at Genetics

Institute,

visit our web site at: www.genetics.com

OPPORTUNITIES IN ANDOVER, MA

Scientific Staff (Mass Spectrometry)

The mass spectrometry group focuses on the development and application of mass spectrometry for the structural analysis of proteins, glycoproteins and carbohydrates. The candidate will help to define and implement MSbased strategies for the analysis of recombinant therapeutics. Candidates should be comfortable working at the interface of analytical chemistry, biochemistry and cell biology. Requires a BhD. and prior experience in the biopharmaceutical industry and a team approach. Additional experience in chromatographic separation methods (electrophoretic and chromatographic), micro-sample handling techniques or other methods for protein and carbohydrate structural analysis is desirable.

Scientific Staff (Cell/Molecular Biology)

We seek an experienced scientist and manager to direct a complex program in the preparation and characterization of mammalian and microbial cell banks used for clinical and commercial production, and in the development, implementation, oversight and troubleshooting of a broad variety of assays to detect microbial (bacteria, yeast, fungi, mycoplasma) and viral contaminants in support of pre-clinical, clinical and commercial production. Qualifications include a Ph.D. in Microbiology, Virology, or related field, plus 6+ years' experience in an industrial or clinical testing environment. Prior management experience a must. Demonstrated experience with cGMPs and regulatory guidelines required; molecular biology experience preferred.

Scientific Staff (Assay Development)

The Cell and Molecular Sciences group seeks an experienced molecular biologist/analytical biochemist to develop and perform assays for residual host cell DNA in support of purification process development and process validation. Candidates must have prior experience developing novel, sensitive and robust methods for quantitation of residual host cell DNA in purification process samples; for qualification/validation of these methods; and for their application towards purification process DNA removal validation for Regulatory submissions. Requires a Ph.D. with 2+ years of experience and experience in analytical method development and validation, particularly as applied to nucleic acid detection/quantification. Familiarity with cGMP's, quantitative PCR, nucleic acid hybridization, ELISA and HPLC analysis is desired.

Development Staff (Manufacturing Process Development)

The successful candidate will participate as a contributing member of a project team as well as independently plan and perform process development studies to support scale-up, optimization, and process improvements including freezing/thawing, filtration, and lyophilization. Will also contribute to process validation studies, and will investigate and address process-related manufacturing deviations and outof-specification analytical results. Requires a Ph.D. with 1-5 years' experience in an Engineering, Pharmaceutical Science, or other related scientific field.

Scientific Staff

(Purification Process Development)

We seek qualified individuals experienced in the de evelopment and support of biopharmaceutical purification processes. Requires expertise in the areas of protein biochemistry and protein purification, and will work in a multi-disciplinary team environment focussed on development of large-scale processes for the manufacture of protein therapeutics suitable for use in human clinical trials. Will be responsible for ongoing support and troubleshooting of established commercial manufacturing process operations. A Ph.D. in Biochemistry, Chemistry, or related discipline and 5+ years of industry experience are required with a demonstrated expertise in cGMP's. Experience with large-scale protein purification chromatography, knowledge of analytical separation techniques, and a research interest in novel approaches to the design and implementation of purification processes are of particular importance. Experience in methods of biochemical and biophysical protein characterization desirable.

Scientific Staff (Formulations/Drug Delivery)

The Drug Product Development group seeks an individual to take a leadership role in the development of our protein based products focusing on understanding the stabilization, analysis and delivery of protein based pharmaceuticals. The position requires a PhD. in Pharmacy, Biochemistry or related field and 8-15 years' industrial experience in the development of pharmaceutical dosage forms. The candidate should have a strong background in drug delivery and/or protein chemistry.

Scientific Staff (Analytical Chemistry)

We seek a Ph.D. level scientist with experience in analytical chemistry, HPLC, and spectroscopic techniques (primarily FTIR). Qualifications include a Ph.D. in Analytical Chemistry or a closely related field and 5+ years of biopharmaceutical/pharmaceutical experience. The successful candidate will be responsible for activities supporting both developmental and existing commercial products. The candidate must have the ability to simultaneously manage multiple projects in a timely manner.

Scientific Staff (Biophysical Chemistry)

We seek a Ph.D. level scientist/manager to establish and lead a biophysical group that focuses on the characterization of recombinant glycoproteins and development and application of analytical technologies for the evaluation of protein structure and stability. Qualifications include a Ph.D. in Biophysics, Physical Chemistry or a related discipline with a minimum of 5 years of relevant work experience. A strong background in protein structure, protein folding, protein/protein interactions and stability, as well as experience with biophysical techniques, such as ultracentrifugation, calorimetry, surface plasmon resonance, CD spectroscopy and light scattering is required.

Genetics Institute offers competitive compensation and comprehensive benefits programs including medical/dental insurance, 401(k), 3 weeks paid vacation, stock options, cash bonus, child-care subsidies, flex time, business casual Fridays, on-site fitness center, relocation and professional development programs. Please forward your resume and salary requirements mentioning job position to: Wyeth-Ayerst, Reference OPSCI, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax in fine mode 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.

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PRAECIS' mission is to discover, develop and commercialize pharmaceuticals through integration of proprietary combinatorial technologies and high-throughput screening capabilities. We are a biopharmaceutical company involved in innovative research in Prostate Cancer, Endometriosis, Alzbeimer's Disease and Growth Factor Biology. Phase III trials for Prostate Cancer and Phase II trials for Endometriosis are ongoing.

Scientist - cDNA/genomic DNA cloning/phage display

We are looking for a highly talented and motivated scientist to work in our Molecular Biology Department. A Ph.D. (or equivalent) in a biological science is required along with 3+ years' related Postdoctoral research. The successful candidate will be an expert in the extraction of mRNA from tissue/cells, cDNA library construction and DNA manipulation in general. In addition, experience with phage display library construction/screening and related technologies a must. We need a scientist who thinks and works independently and who has a proven track record in research, backed up by publications in major scientific journals. Experience with day-to-day supervision of laboratory staff is highly desirable, preferably in an industrial setting. This is an opportunity to join a rapidly growing department that is at the forefront of the discovery of novel pharmacologically-active peptides for drug development.



The Future in Drug Development

Please send your resume to: Human Resources, PRAECIS Pharmaceuticals, Inc. One Hampshire Street, Cambridge, MA 02139 Fax: 617-621-8679

We offer a highly competitive compensation and benefits package. No phone calls, please. Visit our website at www.praecis.com. An equal opportunity employer.

SK Bio-Pharmaceuticals

Business Development Director / Vice President

Candidate should possess a minimum of 7 years experience in pharmaceutical business development initiatives with focus on drug licensing-in/out, fund raising and venture incubations. A Bachelor, MBA or Ph.D. with strong technical background in pharmaceutical emerging technology and a good tracking record is required.

Senior Behavioral Pharmacologist

Candidates should have a relevant Ph.D. degree with at least 4-5 years experience in an industrial environment and in the fields of operant techniques and experimental models of anxiety, depression and schizophrenia. We are looking for a research scientist interested in the development of innovative drugs and with good interpersonal skills. The ability to work as part of an interdisciplinary team is important, as there are established collaborative links with key academic groups, which form a vital part of the total project.

Behavioral Pharmacologist

The successful candidate will implement/run in-vivo models and in-vitro assays to test potential anti-anxiety and anti-psychotic agents. The position requires an MS in pharmacology or a relevant discipline; A minimum of 2-3 years hand-on experience in animal behavioral models and the ability to work independently are essential.

We offer a competitive salary, full benefits and career advancement within a progressive, growing company. Please forward your resume/CV to **Personnel Department**, **SK Bio-Pharmaceuticals**, **140A New Dutch Lane**, **Fairfield**, **NJ 07004**. **FAX:** (973) 227-4488.

Faculty Positions in Cancer Research LSU Health Sciences Center

The Stanley S. Scott Cancer Center at LSU Health Sciences Center in New Orleans invites applications for tenure track or tenured positions at the Associate Professor or Professor level. Candidates should possess a Ph.D. or M.D. degree and have demonstrated excellence in their research as indicated by both publications and a track record of externally funded research grants. The successful applicants will be expected to pursue an independent, yet collaborative approach, addressing broad issues that relate to oncologic science. Research interests in prostate and/or lung cancer are encouraged but not required.

The search will give full consideration to applications that include a curriculum vitae (including funding grant history), four representative publications, and the names of three individuals that may be contacted for letters of reference.

Joint appointments in the Cancer Center and an appropriate Department at the LSU Medical School are anticipated. The individual Departments will be dependent on the successful applicants' expertise and interests. Laboratory space will be provided in a new state of the art facility in the heart of the Medical School complex. LSUHSC is an EOE/AA.

Interested candidates should submit their curriculum vitae to Dr. Oliver Sartor, Director, Stanley S. Scott Cancer Center, Suite 620, 2025 Gravier Street, New Orleans, Louisiana 70112.

PH.D., MS. BS NEUROSCIENCE/ PSYCHOLOGY/PHARMACOLOGY

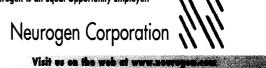
The Behavioral Biology Department is looking for a Ph.D. in Neuroscience/ Psychology/Pharmacology with a minimum of 2-3 years' postdoctoral experience to contribute to our drug discovery efforts in identifying novel analgesic agents. Expertise in the evaluation of drugs in acute and chronic pain models is a necessity. The candidate should possess excellent communication skills and additional relevant experience in a pharmaceutical environment is highly desirable.

Candidates with a BS or MS in Experimental Psychology, Biology or related field to aide in the drug discovery process of central nervous system disorders are also desired.

At Neurogen Corporation, we believe in the importance of our employees health and well-being, and are proud to offer a comprehensive and competitive benefits package that includes medical, dental, life, accidental death and dismemberment, and long-term disability insurance, health care and dependent care accounts, 401K plan, stock options and 3 weeks' vacation. And all medical, dental and life insurance benefits start on the employee's date of hire!

Founded in 1987 by scientists from one of the world's leading research universities, today Neurogen is a recognized leader in discovering drugs which act at the burgeoning number of new drug targets emerging from scientific advances in understanding the genetic and molecular underpinnings of diseases. Neurogen's Accelerated Intelligent Drug Design program and its other drug discovery technologies, together with its R&D collaborations with major pharmaceutical companies, have catapulted Neurogen to a leading position in the biotechnology and pharmaceutical industries.

For consideration please send resumes: Email: snolan@nrgn.com, Fax: (203) 481-8683; Mail: Neurogen Corporation, ATTN: Human Resources, 35 NE Industrial Road, Branford, CT 06405. Neurogen is an Equal Opportunity Employer.



Staff Physician and Staff Scientist Position Molecular Imaging Branch National Institute of Mental Health

The National Institute of Mental Health (NIMH) has established a new Molecular Imaging Branch to expand PET radiotracer development, with imaging applications in both humans and animals. Staff Scientist (PhD) and Staff Physician (MD) positions are available for evaluation and application of PET tracer imaging to provide neurochemical information relevant to the pathophysiology and treatment of neuropsychiatric disorders. In addition to traditional membrane-bound receptor targets, this Branch will seek to develop probes for intracellular signal transduction and gene expression. Although not strictly segregated, the PhD Scientist would more likely be involved in imaging studies in animals (both rodent and non-human primates); and the MD Physician with studies in human subjects. Studies in psychiatric populations are strongly encouraged and will be performed in collaboration with other Branches at NIMH. Candidates must have a Ph.D. and/or M.D. with an established record of scientific accomplishments and possess a strong publication record. Start date is flexible but would optimally be within the period Oct. 1, 2000 to July 1, 2001. Applicants should send a curriculum vitae, statement of research interests, and list of six references by Sept. 15, 2000 to: Robert B. Innis, MD, PhD, Chief, Molecular Imaging Branch; c/o Office of Scientific Director, NIMH; Bldg.10, Rm.4N222, 10 Center Drive-MSC1381; 9000 Rockville Pike; Bethesda, MD 20892-1381.

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UIC The University of Illinois at Chicago

DIRECTOR OF NEUROLOGY RESEARCH

The Department of Neurology at the University of Illinois at Chicago invites applications from exceptional candidates with the MD or PhD to provide leadership for an interdisciplinary research program in neurology. The director will be expected to maintain an independent research effort in some aspect of neurology and shape federally-funded program projects and training programs that can provide the basis for an important new investigative initiative. Candidates should have significant publications, a record of external funding, and a commitment to lead multidisciplinary research and training programs in a cutting edge aspect of neurology. The candidate will be appointed to a tenuretrack position as Professor of Neurology and will elect a secondary appointment in a relevant basic science department.

The Department of Neurology seeks to establish an investigative program of the highest quality to complement and extend the institution's investment in neuroimaging that includes an existing 3T and a proposed 9.4T MR scanner. The appointee will work with faculty in the Department of Neurology to expand clinical research in neuroimaging and will be encouraged to collaborate with neuroscientists in the Departments of Physiology & Biophysics, Pharmacology, Radiology, Psychiatry and Neurosurgery. Faculty in these departments will participate in the director's recruitment and are committed to productive interactions with members of the proposed program.

Screening of applicants will begin on June 1, 2000 and will continue until the position is filled. Interested candidates should send a letter of interest outlining the direction of a proposed research program, a curriculum vitae, and the names of five references who can be contacted by the Search Committee. Direct applications and questions to: Dr. Daniel Hier, Department of Neurology, University of Illinois at Chicago, MC 796, 912 South Wood St., Chicago, IL 60612-7330. Telephone 312-996-1757. Email at neuro@uic.edu. UIC is an AA/EOE employer. Molecular Science

AstraZeneca is a worldwide leader in the research, development and production of innovative pharmaceuticals. Our portfolio spans seven major therapeutic areas — a formidable array of products backed by a strong research base. We currently have openings for the following scientists:

Gene Expression Profiling Supervisor (MS-3722)

In this position, you will be responsible for gene expression profiling campaigns utilizing microarray technologies, and for verifying changes in gene expression by other technologies including quantitative RT-PCR. You should have at least 3 years' experience with Affymetrix Genechip or other microarray technologies, preferably in an industry setting, and with experimental design, data assessment and bioinformatics analyses. Experience with other techniques for quantitative assessment of differential gene expression, including Taqman, is desirable. A PhD in Biology or other relevant discipline, and at least 3 years of postdoctoral experience are also required.

Infrastructure Development Scientist (MS-3723)

You will be responsible for developing key bioinformatics infrastructure to support projects and disciplines such as Proteomics, Sequencing, and Expression Analysis. A MS/PhD in Bioinformatics, Molecular Biology, Computer Science or related field and 1-5 years' experience in computational biology/bioinformatics projects are required. You must also have practical knowledge in the use of genomic databases (GenBank, UniGene, LifeSeq), hands-on experience with the relevant sequence analysis tools (GCG, Blast/FastA, MFold), demonstrated computer skills including experience with scripting languages (e.g. Perl), and excellent understanding of the basis of nucleic acid structure and gene expression profiling.

Transgenic Lab Supervisor (MS-3721)

You will supervise the operations of a facility investigating gene functions in the central nervous system and developing models of CNS diseases. A PhD in Biology or other relevant discipline, and at least 3 years' postdoctoral experience with the generation and characterization of transgenic mice are required.

Proteomics Specialist (MS-3720)

In this position, you will be responsible for conducting 2D-PAGE analyses of protein samples, liquid chromatography, and mass spectrometry provided for proteomics campaigns in target identification projects. A MS/PhD in Biochemistry or other relevant discipline, and at least 3 years' relevant laboratory experience are required. Facility with 2D-PAGE, image analysis of the resulting gels and subcellular fractionation methods is also required.

AstraZeneca offers an excellent compensation and flexible benefits program, and opportunities for growth with one of the world's leading research organizations.

To apply, please send your c.v. with job code to: Human Resources-MS, OW3, AstraZeneca 1800 Concord Pike, Wilmington, DE 19850-5437. Fax: 302-886-7124.





Eli Lilly and Company is a world leader in the pharmaceutical industry. We create and deliver innovative pharmaceutical-based health care solutions that enable people to live longer, healthier, and

more active lives. Our business strategies create good opportunities for professionals who insist upon cutting edge projects and excitement in their work.

BS/MS CARDIOVASCULAR RESEARCH

Multiple associate positions exist in the cardiovascular research group for work directed towards congestive heart failure. Skills in molecular and cell biology with previous cardiomyocyte experience are preferable. Additional associate positions exist for candidates with experience in electrophysiology including calcium and contractility measurements in primary neonatal and adult cardiomyocytes. Candidates with small and large animal surgical skills and previous experience with in vivo monitoring of cardiac function are also encouraged to apply. All candidates with molecular, cellular and or in vivo experience will be expected to contribute creatively to basic and applied research directed towards drug discovery for Congestive Heart Failure. Candidates should exhibit excellent communication, interpersonal skills and also be willing to work in a team environment.

We are also seeking an associate biochemist (MS/BS) to participate in the discovery of novel anticoagulants and to perform basic research toward the understanding of relevant biochemical mechanisms in the blood coagulation system and in thrombosis. The research would include in vitro studies of blood coagulation pathways and the pharmacological modulation of various factors important to thrombosis and hemostasis. We prefer an individual with strong basic biochemistry and analytical skills, with the ability for independent and creative scientific work. Expertise in particular aspects of blood coagulation would be advantageous.

We offer competitive salaries, outstanding benefits, the potential for advancement and challenging opportunities employees look for today. For immediate consideration, please visit our website at www.Lilly.com to submit your resume, or send your resume to: Eli Lilly and Company, Lilly Corporate Center, Source Code ADSCMB170, US Recruiting and Staffing, DC 1811, Indianapolis, IN 46285. We are an equal opportunity employer that values the strength diversity brings to the workplace.



MAYO CLINIC POSTDOCTORAL RESEARCH ASSOCIATE GASTROINTESTINAL NEUROSCIENCE

A postdoctoral research associate position in gastrointestinal neuroscience is immediately available for an outstanding scientist to work on the molecular basis underlying the role of G-protein coupled receptors in human gastrointestinal function and diseases. The applicant should have a strong background in protein chemistry and/or molecular biology and previous experience in receptor biology. The successful applicant will participate in a collaborative translational research effort among world-recognized clinical investigators and basic researchers. Research facilities include several state-of-the-art biochemistry, genetics, morphology, structural biology, and transgenic mouse cores.

Mayo Clinic offers very competitive salary and benefits packages. Send a curriculum vitae, a description of research experience, and three academic references to:

Raul Urrutia, MD/Michael Camilleri, MD Mayo Clinic Alfred 2-435 200 First Street SW Rochester, MN 55905 E-mail: urrutia.raul@mayo.edu

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

MANAGER ANIMAL CARE FACILITY

The Biological Resources Unit of the Cleveland Clinic Foundation is seeking a manager for its Small Animal Care Facility (primarily rodents). The manager will be responsible for the daily operation of the small animal facility, which includes supervision of the physical plant and personnel, purchasing, record keeping, and interactions with the research staff. The successful candidate will therefore have strong management, leadership, and interpersonal skills. Familiarity with animal welfare regulations and AALAC accreditation standards is required; the individual should either be AALAC cartified, or willing to obtain certification promptly. Extensive experience (3 year minimum) in a research mouse facility is required. Familiarity with mouse models of disease and genetically modified animals will be an advantage. Although a B.S. degree is preferred, a combination of experience and practical training may be substituted.

The Cleveland Clinic Foundation has a long-standing commitment to excellence in basic and applied research. Ongoing expansion of the research facilities has led to a rapid expansion of the Biological Resources Unit. The manager will have the opportunity to participate in the design and planning of a new facility. A competitive salary and benefits package will be provided.

Qualified candidates should send resume to: Miriam Barton, The Cleveland Clinic, P.O. Box 606140, Cleveland, OH 44106. Fax: (216) 444-6096.

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FMC Corporation's Agricultural Products Group is embarking on a genomics-based research program to discover proprietary target sites and ultimately world-class pesticide products. This is an opportunity to be a part of the biotechnology revolution and apply your skills to leading-edge science. Positions are available at all levels at our state-of-the-art research facility in Princeton, NJ for the following:

ADME RESEARCH SCIENTIST

This challenging position will support our discovery efforts in developing and conducting in vivo and in vitro insecticide metabolism assays. Involves close interaction with other discovery toxicology teams. Ideal candidate will have a Ph.D. in biochemistry, entomology, or other applicable science-based discipline. Experience with insect/mammalian biochemistry, insect/mammalian physiology, enzyme isolation, and lab analytical techniques (HPLC, LC-MS) is desirable. Incumbent must enjoy working in a collaborative, team-based environment.

FMC offers a stimulating, flexible work environment with competitive salary and benefits. Please send cover letter and resume to FMC Employment Coordinator, Box 8, Princeton, NJ 08543, E-mail: princeton_hr_jobs@ fmc.com. Please reference Job No. 00-19. FMC is an Equal Opportunity Employer.

Tenure-Track Investigator Interventional Magnetic Resonance Program National Heart, Lung and Blood Institute (NHLBI) National Institute of Health (NIH)

The Interventional Magnetic Resonance Program is a new initiative in the Division of Intramural Research, NHLBI. It is anticipated that this program will facilitate the development of MR technology as a clinical tool for interventional procedures. An emphasis will be placed on clinical research and clinical protocols. The program will include collaborations with other investigators interested in applications of MRI, vascular biology and cardiology.

The Interventional Magnetic Resonance Program is located in the Clinical Center (Building 10) on the NIH Campus in Bethesda, Maryland. A state-of the-art MRI scanner will be co-located with a bi-plane fluoroscopy system for the development of novel interventional procedures. Compensation will be commensurate with education and experience. The successful candidate may be eligible for other incentive programs such as the loan repayment program.

All applications should include the following: a current curriculum vitae and bibliography, a one- page summary of research accomplishments and research plans, and the names, addresses, and telephone numbers of five professional references. Completed applications should be sent to:

Ms. Lisa Nadzam, National Heart, Lung and Blood Institute National Institutes of Health, Building 10, Room 8C103 Bethesda, Maryland 20892

Applications must be received no later than **July 15, 2000**. Requests for additional information may be obtained by contacting Dr. Robert Balaban, the Search Committee chairman, at the above address.

Applications from women, minorities, and persons with disabilities are strongly encouraged. The NHLBI/NIH is a smoke-free workplace.

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Chair and Professor Department of Biochemistry University of Missouri-Columbia

Applications and nominations are invited for the position of Chair of the Department of Biochemistry, University of Missouri-Columbia. The successful candidate must have established an ongoing competitive research program and have the leadership ability, breadth of interests, and vision to chart the course of the Department in its expanding role in life sciences on the campus. The Department has University-wide responsibilities for undergraduate. graduate and professional education in biochemistry, and multifaceted research programs that relate to both agriculture and medicine. Current faculty have research programs in structural biology, plant biochemistry, cell signaling. cancer research, human genetics, and bioremediation. Additional information can be found on our web site http://www.biochem.missouri.edu

Applications should include a complete curriculum vitae, a brief summary of the candidate's professional background, and the names of three references. Interested applicants should contact:

> Chair Biochemistry Chair Search Committee Department of Biochemistry 117 Schweitzer Hall University of Missouri-Columbia Columbia, MO 65211

Applications will be reviewed beginning July 1, 2000 and will be accepted until the position is filled. *The University is an Equal Opportunity/Affirmative Action Employer.* To request ADA accommodations, please contact our ADA Coordinator at 573-884-7278 (email: adaww@showme.missouri.edu).



NIH Health Scientist Administrators

The Center for Scientific Review (CSR) at the National Institutes of Health (NIH) is undergoing an expansion. CSR seeks to identify highly qualified research scientists who are interested in serving as Scientific Review Administrators for NIH study sections. They should have broad scientific knowledge of, and a history of proven independent research experience in, one of the following areas: AIDS research, bioanalytical chemistry, bioengineering, bioinformatics, biophysics, cancer research, immunology, microbiology, proteomics, structural genomics, or virology.

In addition, applicants should be highly motivated, enthusiastic individuals with excellent judgment and highly developed communication, analytic, interpersonal, organizational and writing skills. These individuals will shape the future of scientific review.

Scientific Review Administrators are responsible for understanding the current state and identifying future directions of a specific area of biomedical science; selecting members of review panels; managing study section meetings; facilitating interactions with study section members and communicating the results of their deliberations and recommendations to applicants and the staff of the NIH institutes that fund the research.

Applicants must have: a Ph.D. or equivalent degree (or have equivalent training and experience), postdoctoral research training, a significant record of independent research accomplishment, and administrative experience. These are Civil Service positions, *requiring US citizenship*. Salary will depend on experience and accomplishments. A recruitment/relocation bonus may be available.

> Please send your curriculum vitae to: Jean K. Paddock, Ph.D. Center for Scientific Review National Institutes of Health 6701 Rockledge Drive, Room 5100 Bethesda, MD 20817 Or scirev@csr.nih.gov

Selection for all positions will be based on merit, with no discrimination for non-merit reasons, such as race, color, sex, national origin, marital status, handicap, age, sexual orientation, or membership/non-membership in an employee organization. Further information and qualification details can be obtained on the web site http://www.csr.nih.gov/interest.htm. Deadline for consideration: August 4, 2000.

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INVESTIGATOR PHARMACEUTICAL DEVELOPMENT

SmithKline Beecham, an international producer of pharmaceuticals and consumer health care products, is seeking an individual with a background in pharmaceutical technology development to serve as Investigator, Pharmaceutical Development, at its research and development facility in King of Prussia, Pennsylvania. Principle duties include conceiving, planning, and executing preformation and formulation studies of drug candidates to develop robust, solid dosage formulations including immediate-release, controlledrelease, and delayed-release dosage forms; and to carry out physicochemical characterization of drug candidates, employing state-of-the-art methods, techniques, and computer programming. Minimum requirements are a Ph.D. in pharmaceu-

Minimum requirements are a Ph.D. in pharmaceutics and at least two years of experience in the job offered or two years of experience in pharmaceutical technology development, which shall include experience in (1) formulation design of pharmaceuticals; (2) development of solid dosage forms of drug candidates; (3) determination of physicochemical, physicomechanical, and biochemical properties of new chemical entities employing DSC, TGA, and SEM techniques; (4) development of immediate-release, controlled-release, and delayed-release drug formulations; and (5) use of spectroscopic methods including HPLC, UV, IR, and MS. Must be proficient in the use of pharmacokinetic/pharmacodynamic modeling software such as PCDCON and WIN-NONLIN.

SmithKline Beecham offers a competitive compensation/benefits package. For confidential consideration, please forward résumé and salary requirements to: Dr. Francis X. Muller, Assistant Director, Pharmaceutical Technologies, SmithKline Beecham Pharmaceuticals, P.O. Box 5089, UP1230, Collegeville, PA 19426-9901. We are an Equal Opportunity Employer; Minorities/Females/Disabled/Veterans.

RESEARCH ASSISTANT PROFESSOR NMR SPECTROSCOPY University of Illinois at Chicago College of Medicine Department of Physiology and Biophysics Program in Cardiovascular Sciences

A nontenure-track position as Research Assistant Professor in physiology and biophysics is available for individuals using NMR spectroscopy to research the link between cardiomyocyte expression of metabolic enzymes and oxidative metabolic flux in determining cardiac performance. The successful candidate will have a Ph.D. or M.D. and a publication record in NMR determinations of metabolic flux regulation and isotope kinetics in the heart, with added experience in producing adenoviruses and gene transfection in cardiomyocyte cultures. For fullest consideration, qualified candidates should submit curriculum vitae and three letters of reference by no later than July 7. 2000, to: E. Douglas Lewandowski, Ph.D., Pro-fessor, UIC Department of Physiology and Bio-physics, 835 South Wolcott (M/C 901), Chicago, IL 60612-7319. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer

A structural biology **POSTDOCTORAL POSI-TION** is available immediately in the Laboratory of Molecular Biology, NIDDK, NIH, to apply X-ray crystallography to biological systems involved in gene transfer with potential applications to gene therapy. The Laboratory provides an interdisciplinary environment with access to state-of-the-art facilities. Candidates must have obtained a Ph.D. degree within the past five years and have experience in a field such as biophysical chemistry, biochemistry, or molecular biology with a keen interest in macromolecular structures and structural methods. Please send a cover letter, curriculum vitae, and the names and addresses of three references to: Dr. Fred Dyda, LMB, NIDDK, Building 5/Room 334, 5 Center Drive, MSC 0560, Bethesda, MD 20892-0560. E-mail: dyda@ ulti.niddk.nih.gov. NIH is an Equal Opportunity Employer. NIH is dedicated to building a diverse community in its hing and employment practices.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION DEPARTMENT OF MOLECULAR AND MEDICAL GENETICS Oregon Health Sciences University

Applications are invited for an ASSISTANT PRO-FESSOR position from individuals who have demonstrated superior research productivity in eukaryotic genetics. Potential research areas include molecular genetic/genomic approaches to problems related to human disease and/or development, including the utilization of model systems and organisms. Candidates must hold a Doctoral degree and will be expected to establish a vigorous independent research program. The Department has established research programs of excellence in molecular, cellular, develop-mental, and human genetics. Opportunities for collaborative research exist both within and outside the Department and for participation in the interdepartmental graduate training program in molecular and cellular biosciences. Applicants should submit curriculum vitae, a description of research interests, and the names of three references to:

Search Committee c/o Janice Blouse Department of Molecular and Medical Genetics, L103 Oregon Health Sciences University 3181 S.W. Sam Jackson Park Road Portland, OR 97201-3098 Website: http://www.ohsu.edu/som-MedGen/

genpage.htm

Applications will be reviewed starting September 1, 2000. Oregon Health Sciences University is an Equal Employment Opportunity/Affirmative Action Employer.

ASSISTANT DIRECTOR CRAWFORD W. LONG HOSPITAL BLOOD BANK Transfusion Medicine Program Emory University

The Department of Pathology and Laboratory Medicine, Emory University School of Medicine, is seeking an Assistant Director at Crawford W. Long Hospital Blood Bank. Candidates should be Board-eligible/Board-certified in blood banking/transfusion medicine and dedicated to a career in academic transfusion medicine. A successful candidate will be mentored and fully integrated into the academic and research activities of the Emory Transfusion Medicine Program, which emphasizes clinical excellence and scholarly pursuits in basic and translational research, primarily in the areas of transfusion-transmitted infectious diseases, immunohematology, and hematopoietic stem cells. Significant time will be made available to establish/continue an individual research program and garner extramural funding. Appointment will be at the level of ASSISTANT or ASSOCIATE PRO-FESSOR, clinical or tenure track, commensurate with the candidate's qualifications. Send curriculum vitae and cover letter describing areas of specific inter-est and long-term career goals to: Christopher D. Hillyer, M.D., Director, Transfusion Medicine Program, Room D-655, Emory University Hospital, 1364 Clifton Road, N.E., Atlanta, GA 30322. Emory University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL: Opportunity available at St. Luke's-Roosevelt Hospital at the James Mara Center for Lung Disease in New York for a full-time Postdoctoral position in research in the area of inflammation immunology in relation to diseases such as asthma and pulmonary emphysema. Candidate should have expertise in techniques of molecular genetics and immunology. Academic appointments will be at the ASSIST-ANT PROFESSOR level at Columbia University College of Physicians and Surgeons. Send curriculum vitae to: Dr. Gerard M. Turino, James P. Mara Center for Lung Disease, St. Luke's-Roosevelt Hospital, 1000 10th Avenue, New York, NY 10019. FAX: 212-523-3416. Equal Opportunity Employer; Minorities/Females/Disabled/Veterans. Women and minorities are encouraged to apply.

POSITIONS OPEN

EXECUTIVE DIRECTOR INLAND NORTHWEST RESEARCH ALLIANCE

The Executive Director is responsible for carrying out the goals of the Inland Northwest Research Alliance (INRA) programs at the Idaho National Engineering and Environmental Laboratory (INEEL) as well as future initiatives undertaken by INRA. INRA is a partner with Bechtel BWXT Idaho, the M&O contractor for the Idaho National Energy and Environmental Laboratory, and is located in Idaho Falls. INRA is a nonprofit organization formed by the presidents of seven Northwest university, University of Montana, Washington State University, Boise State University, Idaho State University, and the University of Idaho—for the purpose of supporting research programs at the INEEL and elsewhere in the inland Northwest. In addition, INRA is exploring other business opportunities.

Minimum qualifications: Master's degree in a scientific discipline, MBA or equivalent experience, and eligible for Department of Energy access authorization. Strong scientific credentials or association with such programs. Desired qualifications: Ph.D. in scientific discipline or experience as a project director. Record of successful participation and leadership in university research programs or national laboratory programs. Understanding of technology transfer and intellectual property issues. Governmental relations experience. Administrative/management experience in large science program and understanding of the development of university research programs. Experience in supervision of staff at varying levels. Experience with state and federal agencies, particularly Department of Energy programs. Experience with planning and leadership of university consortia programs. Demonstrated commitment to Affirmative Action and Equal Opportunity. To apply, send a letter of application outlining relevant experience and a current résumé, along with the names, addresses, telephone numbers, and e-mail addresses of no fewer than three references, to: Robert A. Hoover, President, Inland Northwest Research Alliance, Administration Building, Room 105, University of Idaho-Moscow, Moscow, ID 83844-3151. Telephone: 208-885-6365; e-mail: hoover@uidaho.edu. Review of applications will begin on August 1, 2000. INEEL, Bechtel BWXT Idaho LLC, the INRA, and all INRA member institutions are Equal Opportunity Employers.

IMMUNOLOGIST. Full-time faculty position for M.D. or Ph.D. at the ASSISTANT/ASSOCI-ATE PROFESSOR level in the Infectious Diseases Unit (IDU) at the University of Rochester. Successful candidate will be expected to provide primary immunologic support for ongoing IDU activities and to develop an independent research program in a related area. The IDU contains three major NIH-supported programs: an HVTU (HIV Vaccine Trials Unit), an AIDS Clinical Trials Unit (ACTU), and a VTEU (Vaccine Treatment Evaluation Unit). Address inquiries to: Richard C. Reichman, M.D., Infectious Diseases Unit, University of Rochester Medical Center, Box 689, 601 Elmwood Avenue, Rochester, NY 14642. FAX: 716-442-9328. The University of Rochester is an Equal Opportunity Employer.

POSTDOCTORAL POSITION to characterize fluid and electrolyte secretion by gastric glands using microspectrofluorometric methods. Studies will map changes in parietal cell transport machinery and determine their functional consequences. See website: http://www.biochemistry.ucr.edu/faculty/lytle. html. Experience with imaging techniques preferred. Applicants should send curriculum vitae and reference list to: Dr. Christian Lytle, Division of Biomedical Sciences, University of California, Riverside, CA 92521. FAX: 909-787-5504; e-mail: christian. lytle@ucr.edu.

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER DEPARTMENT OF MOLECULAR GENETICS

Two postdoctoral positions are available to study the mechanisms of differentiation of mesenchymal cells into chondrocytes and into Substantial progress has osteoblasts. recently been achieved by this laboratory in both these areas by the identification of master transcription factors that control these processes. A strong background in molecular biology/molecular genetics is desirable. Salary is commensurate with experience and qualifications. The M. D. Anderson Cancer Center, one of the largest comprehensive cancer centers, is located within the Texas Medical Center that is composed of numerous academic institutions, all within walking distance of each other. This provides one of the largest and most interactive biomedical research communities in the world. Send curriculum vitae and the names, addresses, telephone numbers and email addresses of three references to:

Benoit de Crombrugghe, M.D., Professor and Chairman Department of Molecular Genetics 1515 Holcombe Blvd. Houston, TX 77030

Ph: 713-792-2590; Fx: 713-794-4295 email: bdecromb@mdanderson.org

MDACC is an Equal Opportunity Employer; smoke-free environment. Women and minority candidates are encouraged to apply.

SENIOR LEVEL MOLECULAR BIOLOGIST POSITIONS IN ANTI-INFECTIVE BASIC RESEARCH Southern Research Institute Birmingham, AL

The Drug Discovery Division of Southern Research Institute invites applications from senior level molecular biologists with interests in basic research with the eventual goal of drug discovery for the treatment of infectious diseases. We are particularly interested in attracting scientists with outstanding research programs and a desire to join a dynamic organization that takes an interdisciplinary approach to converting basic research into new FDAapproved drugs. To be considered, applicants must possess a Ph.D. in molecular biology, microbiology or related discipline and at least 5 years of postdoctoral experience. Applicants with an interest in viral, bacterial or fungal molecular genetics are particularly encouraged to apply.

Applicants will be expected to obtain grant-based funding for their research investigations, although transition funding and technical support will be available if appropriate.

The Division annually performs over \$6 million of NIH-funded basic research aimed at target identification and the discovery of novel pharmaceutical agents for the treatment of various diseases. Areas of specialty include: medicinal chemistry, biochemistry, cell biology, molecular biology and protein crystallography. Southern Research Institute has a successful record of development of FDA-approved drugs derived from its multidisciplinary research programs. Southern Research Institute, a not-for-profit research organization affiliated with the University of Alabama at Birmingham (UAB), has revenues of approximately \$50 million, and employs approximately 600 professional, technical, and support personnel. As part of the large biomedical research community in Birmingham, we are committed to providing a stimulating and rewarding work environment. Close proximity to UAB allows for interactions with members of the UAB basic science departments, Comprehensive Cancer Center, Cell Matrix and Adhesion Center, Center for AIDS Research, and Center for Biophysical Sciences and Engineering. Birmingham has a high standard of living afforded by a moderate climate, beautiful, wooded terrain, outstanding residential communities and schools, world-class healthcare, below average cost of living, and a vibrant arts and entertainment scene. Southern Research Institute offers an excellent compensation and benefits package.

Application letters, accompanied by a curriculum vitae, names and addresses of three references, and a summary of current research activities and support should be sent to Dr. John A. Secrist III, Vice President, Drug Discovery Division, Dept. # 769, Southern Research Institute, P.O. Box 55305, Birmingham, AL 35255-5305.



MAYO CLINIC DIVISION OF GASTROENTEROLOGY AND HEPATOLOGY

A Mayo Clinic postdoctoral position is available to study the molecular and physiological properties of interstitial cells of Cajal, the pacemaker of the gastrointestinal tract. Join an established and enthusiastic group using a combined approach with molecular identification of vital signaling proteins, intracellular recording and patch clamp recording of ionic currents, and laser scanning confocal microscopy to characterize dynamic changes in cell calcium. These efforts are expected to lead to a better understanding of the basis for rhythmic electrical activity in the small intestine, and translation of these findings to the clinical setting. Candidates with a background in calcium imaging are preferred. Candidates must be a U.S. citizen or permanent resident and have an M.D. or Ph.D. degree. Please send curriculum vitae and the names of three references to:

Gianrico Farrugia, M.D. Division of Gastroenterology and Hepatology Mayo Clinic 200 First Street SW Rochester, MN 55905 e-mail: farrugia.gianrico@mayo.edu

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

CENTER OF EXCELLENCE IN GENE THERAPY TULANE UNIVERSITY MEDICAL CENTER NEW ORLEANS, LOUISIANA

Applications are invited for positions in the newly established Center of Excellence in Gene Therapy of Tulane Medical Center, New Orleans, LA. The Center was established as a five-year program supported by funding from the University, Columbia HCA, and the Louisiana State Consortium for Gene Therapy. The Center will be dedicated to developing new forms of cell and gene therapy for a series of common diseases, including skeletal diseases such as osteoporosis and osteoarthritis, and diseases of the central nervous system such as parkinsonism, Alzheimer's disease, and stroke. The Center will be housed in newly renovated space within the School of Medicine in central New Orleans and will have additional laboratory facilities at the Tulane Regional Primate Center in Covington.

Assistant Professors - Applications are requested for two tenure-track Assistant Professorships. Applicants must have a strong background in molecular biology and cell biology. Preference will be given to applicants with interests in neuroscience or stem cells. The position includes newly renovated laboratory space and a competitive offer of start-up funds.

Postdoctoral Fellows - Applicants are invited to apply for postdoctoral fellowships in research focused on stem cell biology and the development of stem cells for cell and gene therapy. A major emphasis will be placed on developing strategies for use of patient-derived stem cells for therapy of the same patient. Applicants must have a Ph. D. degree from a well-recognized university and strong letters of recommendation.

Research Technicians - Applicants are invited to apply for positions as either supervisors of technical staff or as research technicians in the Center. Applicants must have a bachelor's degree in a relevant field of biology. Preference will be shown for applicants with extensive experience in tissue culture, immunohistology, or DNA diagnostics.

Applicants should submit a current curriculum vitae, description of research interests, and at least 3 references to: Dr. Darwin J. Prockop, Director, Center of Excellence in Gene Therapy, c/o Dept. of Medicine SL 12, Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112; Fax: 504-584-1600. Tulane University is an equal opportunity/affirmative action employer. Minorities and women are encouraged to apply. Position will remain open until qualified candidates are identified.

MEDICAL/SCIENTIFIC RESEARCH ANALYST

Major Midwest law firm is seeking applicants for the position of Research Analyst. Duties include the review and analysis of medical literature on a variety of topics in the context of pharmaceutical product liability litigation. Position also requires review and analysis of medical records and the preparation and communication to nonscientists of analyses of medical issues. Position way require some travel. This is a high-intensity position which emphasizes practical application of scientific knowledge and requires a result-oriented and self-motivated individual while offering a competitive salary and excellent benefits. The position provides a unique opportunity for scientists to apply their skills outside the area of basic research.

This position requires an outstanding academic record and a graduate degree in biological, life, or biomedical sciences. A working knowledge of pharmacology and/or epidemiology is preferred but not required. Excellent communication skills, both verbal and written, are essential. No legal education or experience required but outstanding interpersonal skills are a must.

Please send a letter of application, complete college transcripts, a personal résumé, and references to: Staff Recruiting Coordinator, Shook, Hardy & Bacon L.L.P., One Kansas City Place, 1200 Main Street, Kansas City, MO 64105-2118. FAX: 816-421-5547.

POSTDOCTORAL RESEARCH ASSOCIATE position available in August 2000 to do research on physical oceanographic processes of U.S. West Coast as part of a large-scale study of nearshore marine ecosystem dynamics. The successful applicant will be expected to develop an independent research project of mutual agreement with the sponsors. Applicants must have a Ph.D. in physical oceanography. Preference will be given to those with interests in interdisciplinary biological/physical studies of very nearshore processes. Expertise in oceanographic analysis and data management, nearshore oceanographic instrumentation and fieldwork, and a demonstrated record of project completion and publication is expected. Position is 1.0 full-time equivalent; salary is \$40,000. Send letter of application; curriculum vitae; and names, addresses, and telephone numbers and e-mail addresses of two references to: Dr. Bruce Menge or Dr. Jane Lubchenco, Department of Zoology, Ore-gon State University, Corvallis, OR 97331. Tele-phone: 541-737-8403. Apply by July 15, 2000; open until filled. Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.

RESEARCH ASSOCIATE SCIENTISTS

Xencor is an exciting, well-financed, nonpublic biotechnology company that uses breakthrough computational and proteomic methods to discover and develop biomolecules. We now have several openings for Research Associates. The successful candidates will be B.S. or M.S.-level Scientists with two years of research experience in molecular biology, protein purification, or cell biology, ideally in an industrial setting. They will be team-oriented, hard working, enthusiastic, and capable of organizing their own day-to-day work. Xencor provides a competitive salary, benefits package, and stock options and the opportunity for advancement in a challenging and stimulating work environment. Please submit your résumé by mail to: Xencor, Job Code PC-201, 2585 Nina Street, Pasadena, CA 91107. E-mail: recruiting@xencor. com. No phone calls, please.

Wall Street independent medical technology equity research firm seeks EQUITY ANALYST for genomics sector to perform technology assessments, write reports, and consult with institutional clients on publicly traded companies. The ideal candidate will have a Ph.D. in molecular biology or immunology with strong interpersonal, organizational, and written skills and computer proficiency. Competitive compensation package (base salary plus bonus). FAX résumé/ cover letter to: 212-541-8288.

POSITIONS OPEN

HEAD: DIVISION OF BEHAVIOR ZOOLOGICAL SOCIETY OF SAN DIEGO Center for Reproduction of Endangered Species (CRES)

The Zoological Society of San Diego seeks a BE-HAVIORAL ECOLOGIST with expertise in studies of the evolution of reproduction to head the CRES Behavior Division. CRES is a multidisciplinary laboratory employing 80 scientists and technicians in its eight divisions (Behavior, Ecology and Applied Conservation, Endocrinology, Genetics, Pathology, Re-productive Physiology, Virology/Immunology, and Analytical Chemistry). In addition to organizing be-havioral studies at the San Diego Zoo and Wild Animal Park, the successful applicant will be expected to supervise an active program of field research on endangered species. A competitive salary and benefits package will be offered commensurate with experience. Applications (to include curriculum vitae and names and addresses of three references) should be sent to: Zoological Society of San Diego, Department of Human Resources, P.O. Box 120551, San Diego, CA 92112-0551. Attention: Behaviorist #172202. The closing date of applications is July 31, 2000. Affirmative Action/Equal Opportunity Employer.

SENIOR SCIENTISTS

Xencor Inc. is an exciting, well-financed, nonpublic biotechnology company that uses breakthough computational and proteomic methods to discover and develop biomolecules. We now seek several senior Ph.D.-level Scientists with a minimum of five years of experience in molecular biology. Successful candi-dates will be highly motivated, able to work in a fastpaced environment, and keenly interested in drug discovery and new drug discovery technologies. Experience in cDNA library construction, protein purification, and/or cell-based assays is a plus. With an emphasis on teamwork, creativity, and intellectual achievement, Xencor is dedicated to providing a challenging and stimulating work environment and a competitive compensation package that includes stock options. Please submit your résumé by mail to: Xencor, Job Code PC-101, 2585 Nina Street, Pasadena, CA 91107. E-mail: recruiting@xencor. com. No phone calls, please

POSTDOCTORAL RESEARCHER

New Mexico Institute of Mining and Technology seeks a Postdoctoral Researcher in biology (one year; renewable contingent upon funding). Successful applicant will perform basic research in molecular biology of pathogenic microorganisms. Ph.D. required in microbiology, molecular biology, or related field. Must have knowledge and skills in molecular biology and microbiology. Knowledge of pathogenic microbiology desired. Knowledge of and skills in bioinformatics and/or virology desired. Must have written and oral English skills. Salary range: \$31,470 to \$39,166. Submit résumé, transcripts, and three references to: New Mexico Institute of Mining and Technology, Human Resources, Wells Hall, Box 71B, Socorro, NM 87801. For further information, see website: http://www.nmt.edu. E-mail applications not accepted. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL OPENING FOR A MOLECULAR BIOLOGIST

This opportunity (two to three years) involves projects on functional genomics and the development of high-throughput methodologies (DNA microarray) for genotyping in molecular epidemiologic studies. The candidate should be familiar with genetic polymorphisms involved in carcinogen metabolism, DNA repair, or in genes controlling cell growth and should possess a working knowledge of conventional genotyping methods. Starting salary is GS-11 equivalent (\$41,834). Interested applicants should submit résumés and three letters of recommendation to: Dr. Fred F. Kadlubar, Director, Division of Molecular Epidemiology, National Center for Toxicological Research, Jefferson, AR 72079. NCTR is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CHAIR AND WILLIAM H. GATES III PROFESSOR Department of Molecular Biotechnology University of Washington

The University of Washington invites applications for the position of William H. Gates III PROFES-SOR AND CHAIR, Department of Molecular Biotechnology. The Department of Molecular Biotechnology is a highly interactive and cross-disciplinary program through which new technology is developed, tested, and applied to address leading-edge problems in biology and medicine (website: http:// www.mbt.washington.edu/). A central part of the Departmental mission is the education of a unique group of individuals who will drive the development of new technologies needed to address biological complexity. The successful candidate must have a Ph.D. or M.D. degree or their equivalent, have a robust and independently funded research program characterized by technological innovation, articulate a vision for the future of biotechnology and the Department, and be committed to interdisciplinary approaches and teaching in this area. Please submit applications or nominations by September 1, 2000, to: Dr. Christopher Wilson, Chair, Molecular Biotechnology Search Committee, Department of Immunology, University of Washington, Box 357650, Seattle, WA 98195-7650. E-mail: barblov@u.washington.edu. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION HEMATOPOIETIC CELL SIGNALING

A Postdoctoral position is available immediately in the Department of Oncology, Lombardi Cancer Center. The research will focus on the signal transduction through the insulin-like Growth Factor I receptor and protein kinase C in hematopoietic cells, particularly in immune cell malignancies and myeloid cell differentiation. For references, please see Mol. Cell. Biol. 18: 5888, 1998, and 19:3816, 1999; Oncogene 18:6564, 1999; and Cancer Res. 2000 (in press). The applicants should have strong knowledge in molecular biology, immunology, or cancer cell signaling. Please send curriculum vitae and names of three references to the following address: Dr. Weiqun Li, Lombardi Cancer Center, Georgetown University Medical Center, 3970 Reservoir Road N.W., NRB, E407, Washington, DC 20007. Telephone: 202-687-8387; FAX: 202-687-7505; e-mail: wwl@gunet. georgetown.edu.

POSTDOCTORAL FELLOWSHIP DEPARTMENT OF MOLECULAR ONCOLOGY John Wayne Cancer Institute

Position available in molecular oncology for Postdoctoral Fellow with less than one year of experience post-Ph.D. or M.D. Projects available in DNA microarray analysis, microsatellite LOH detection in body fluids/tissues, and clinical molecular genetic translational research. Must have capability in leading research groups, communication and writing skills, creativity in designing new approaches in molecular translational research, and understanding clinical ranslational research in breast, colon, and/or melanoma. Excellent benefits with salary range \$27,000 to \$40,000 per year. Please submit curriculum vitae, career objective, and three letters of reference to: John Wayne Cancer Institute, Department of Molecular Oncology, 2200 Santa Monica Boulevard, Santa Monica, CA 90404.

COOPERATIVE EXTENSION SPECIALIST: anadromous and inland fisheries (reopened). Ecologist extends information and conducts focused applied research. Required Ph.D., excellent written and oral communication skills, and understanding of anadromous and inland fish ecology/biology; evidence of outreach teaching desirable. Contact: C. M. Dewees, Search Chair, WFCB, 1 Shields Avenue, University of California, Davis, CA 95616-8751. Telephone: 530-752-1497; e-mail: cmdewees@ ucdavis.edu.

Research Associate and Postdoctoral Associate Positions

Department of Molecular Medicine seeks applicants for both Research Associate and Postdoctoral Associate positions to lead novel areas of study in an established signal transduction laboratory. One area involves the use of structural (X-ray crystallographic) and fluorescence spectroscopic approaches to study the interactions of Cdc42 with new targets and regulators and to compare these with analogous interactions involving heterotrimeric Gproteins. A second area involves the study of a new GTP-binding protein, which acts as a critical switch in cell fate determination. The third area explores signal pathways which impact on mRNA splicing and RNA trafficking. Highly motivated individuals with recent Ph.D. or M.D. degrees and a strong background in structural, molecular and/or cellular biology are encouraged to apply.

Please send a CV and 3 references to: Dr. Richard A. Cerione, Department of Molecular Medicine, Cornell University, Ithaca, NY 14853-6401. E-mail: rac1@cornell.edu

Cornell University is an Affirmative Action/Equal Opportunity Educator and Employer.

SENIOR SCIENTIST/SCIENTIST

Roche

Roche Molecular Systems, Inc. is a worldwide leader in research, development, and manufacturing of molecular diagnostic reagents. Our Detection Formats Technical Team has exceptional opportunities for both Scientists and Senior Scientists in our Belleville, New Jersey Manufacturing Operations area for the production and testing of PCR in vitro diagnostic and biological products. The positions are intended to relocate to our new, state-of-the-art production facility in Pleasanton, California within the next 2-3 years.

The Senior Production Scientist will be responsible for the coordination/execution of weekly production schedule/activities and personnel associated with a particular operations technical team sub-group, including large scale bulk formulation or DNA-probe immobilization to magnetic particles or MWP. The successful candidate will have a Bachelor's Degree in Biochemistry, Molecular Biology, or equivalent, with 3-5 years experience, or Master's Degree with 0-3 years' experience in a diagnostic, biotechnology, or pharmaceutical manufacturing operation. A working knowledge of PCR methods is required. Familiarity with cGMPs, QSRs and ISO requirements is also essential. Ability to handle manufacturing documents and coordinate/implement production schedules is necessary. Strong verbal and written and communication skills are required.

The Production Scientist will be responsible for the daily execution and in-process testing of manufacturing process orders/products associated with a particular operations technical team sub-group. The successful candidate will have a Bachelor's Degree in Biochemistry, Molecular Biology, or equivalent, with 0-3 years' experience in a diagnostic, biotechnology, or pharmaceutical manufacturing operation. A working knowledge of PCR methods is required. Familiarity with cGMPs, QSRs and ISO requirements is also essential. Strong verbal and written communication skills are desired.

We offer a competitive salary, generous benefits package, and state-of-the-art environment that is conducive to professional success. For consideration, please forward your resume and salary requirements to: Human Resources Dept., Detec, Roche Molecular Systems, Inc., Branchburg Township, 1080 U.S. Highway 202, Somerville, N.J. 08876-3771. We are an equal opportunity employer m/t/d/v.





Announcement Regarding Entrustment of Industrial Science and Technology Research and Development Project

The New Energy and Industrial Technology Development Organization (NEDO) is planning to launch one (1) new research and development project in FY2000 based on funds provided by the Ministry of International Trade and Industry (MITI) of Japan. This new research and development project is as follows: **Structural Analysis and Informatics Technology of Biopolymers.** NEDO is planning to invite applications from organizations interested in participating in the above project. A public announcement calling for applications was made June 5, 2000. Details regarding application procedures, project outline and the date and the place of an explanatory meeting were posted on NEDO's homepage (http://www.nedo.go.jp) and announced in MITI International Bulletin on June 5, 2000.

Applied Technology Department Fax: 81-3-3987-9396 New Energy and Industrial Technology Development Organization (NEDO) Sunshine Building 60 29F 3-1-1, Higashi-Ikebukuro Toshima-ku, Tokyo, Japan

NATIONAL INSTITUTES OF HEALTH NATIONAL CENTER FOR RESEARCH RESOURCES Health Scientist Administrators

The National Center for Research Resources invites applications for two positions of Health Scientist Administrator, NCRR, NIH. The incumbents of these positions will be responsible for providing technical leadership and scientific guidance in the planning, development, evaluation, and administration of resource grants and contracts. Some of the major professional duties the incumbent performs include: 1) negotiations with officials of the nation's universities and research institutions; 2) interpretation of federal policies and procedure; 3) identification of biomedical research resource needs; 4) advisor to potential grantees about developing competitive applications for research resource grants to meet national research needs; and 5) performs other related scientific and administrative functions; interacts with other government science program administrators, university scientists, and academic deans to facilitate their development of research resources to enhance and catalyze health-related research.

To view the full text vacancy announcement and requirements, applicants are strongly encouraged to access the NIH automated vacancy retrieval system at **http://careerhere.nih.gov** and view vacancies within the National Center for Research Resources. This announcement relates to permanent full-time positions with a salary range of \$60,890 to \$122,400 (*Title 42) per annum commensurate with qualifications within NCRR's Comparative Medicine and Biomedical Technology areas. A recruitment bonus of up to 25% of base pay may be available to a non-federal selectee for this position. A relocation bonus of up to 25% of base pay (subject to approval) may be available to a permanent Federal employee who must relocate to accept this position.

Send applications to National Institutes of Health, National Center for Research Resources (NCRR), 31 Center Drive, MSC 2131, Bethesda, MD 20892. For additional information contact the NCRR Personnel Office on (301) 496-1524. Deadline for applications is June 26.

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

*Candidates interested in applying for this position under Title 42, excepted service, may submit a resume to the above address.

NIH is an Equal Opportunity Employer

CANCER TOXICOLOGIST/BIOLOGIST ASSISTANT/ASSOCIATE PROFESSOR University of Connecticut

The Department of Pharmaceutical Sciences of the School of Pharmacy at the University of Connecticut (website: http://pharmacy.uconn.edu) invites applications for a tenure-track position at the ASSIST-ANT or ASSOCIATE PROFESSOR level in its pharmacology/toxicology discipline to begin on or about January 1, 2001. Appointment will be commensurate with level of experience; preference given to those with research background. Candidates must have a Ph.D. in toxicology or pharmacology or related fields, postdoctoral training, and will be expected to develop and maintain innovative, independent, and externally funded research programs which emphasize molecular toxicology. The successful candidate will also be expected to teach at both the undergraduate and graduate levels. Preferred research interests include but are not limited to DNA adduct formation and repair, mechanisms of chemical carcinogenesis, and/or xenobiotic regulation of gene expression in cancer. The successful candidate will have the opportunity to interact with and complement our existing programs in cell signaling and receptor-mediated xenobiotic interactions and to interact with faculty in our NIH pre- and postdoctoral training program in toxicology. Applicants should send curriculum vitae, a statement of research interests, and arrange for three letters of recommendation to be sent directly to: Dr. Andrea K. Hubbard, Chair, Pharmacology, Toxicology Search Committee, Department of Pharmaceutical Sciences, School of Pharmacy, U-2092, University of Connecticut, Storrs, CT 06269. E-mail: Hubbard@uconnvm.uconn.edu. Applications will be received until the position is filled. Initial review of applications will begin September 1, 2000. We encourage applications from women, minorities, and people with disabilities.

POSTDOCTORAL POSITIONS

The Eppley Institute for Research in Cancer of the University of Nebraska Medical Center (UNMC) is seeking talented Postdoctoral Fellows for training in cancer research. A wide variety of opportunities are available from our multidisciplinary approach to cancer biology. Major research areas include but are not limited to cell signaling, cell cycle, cell senescence, apoptosis, cancer genetics, gene expression, DNA repair, chemical carcinogenesis, and tumor immunology. The Eppley Institute is part of the UNMC/ Eppley Cancer Center, an NCI-designated cancer research center.

Attractive compensation packages for Postdoctoral Fellows are funded by two interactive training grants, one from NCI and a second from the U.S. Army, and by other funds. Positions are available immediately. For more information about the Eppley Institute, the Cancer Research Training Program, and the Breast Cancer Training Program, please visit our **website**: **www.unmc.edu/Eppley/**. Links are provided to faculty research interests, recent publications, and contact information.

To apply, send a cover letter indicating the specific laboratory or laboratories of interest, curriculum vitae, and three letters of recommendation to: **Robert Lahue**, **Eppley Institute**, **Box 986805**, **UNMC**, **Omaha**, **NE 68198-6805**. E-mail: rlahue@unmc. edu. UNMC is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW AQUATIC ECOLOGY

Participate in research program at the Academy of Natural Sciences, Philadelphia, Pennsylvania, focused on the ecology of benthic stream organisms. Prefer candidate with research experience in freshwater or marine environments but will consider applications from candidates with relevant research experience in terrestrial systems. Position available beginning summer/fall 2000. Deadline for receipt of applications: July 14, 2000. For details, visit website: http:/// www.acnatsci.org/research/jobs.html#701. E-mail applications/inquiries to: hart@acnatsci.org.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATES AND POSTMASTER SOFTWARE ENGINEER POSITIONS Computational Biology/Bioinformatics Oak Ridge National Laboratory

Applications are invited for Postdoctoral and Postmaster positions in the Computational Biosciences section of Life Sciences Division at the Oak Ridge National Laboratory (ORNL). The successful candidate will participate in research and development of computational algorithms and software for mining microarray expression data, modeling biological pathways, or protein structure prediction/modeling. An advanced degree with demonstrated experience in computer programming is required. Additional experience is desired in any of the following areas: bioinformatics, computational biology, biological pathway studies, protein folding/threading, high-performance computing, and large-scale software development. More information on ORNL and its divisions can be found at websites: http://www.ornl.gov and http://compbio.lsd.ornl.gov/.

Funding is available for appointments of up to three years. They are offered through the ORNL Postdoctoral Research Associates Program. Interested candidates should complete and submit a "Recruited Position" application for either the ORNL Postdoctoral Research Associates Program or the ORNL Postmasters Research Participation Program. An application and a complete description of these programs are available at websites: http://www.orau.gov/orise/edu/ postgrad/ornlpdoc.htm or http://www.orau. gov/orise/edu/postgrad/ornlpmappmat_htm. A copy of the application can also be obtained by contacting: Bonnie DeJarnette; Telephone: 865-241-5386; e-mail: dejarneb@orau.gov. Specific technical questions related to this position should be directed to: Ying Xu, Ph.D., Oak Ridge National Laboratory, P.O. Box 2008, 1060 Commerce Park Drive, Oak Ridge, TN 37831-6480. Telephone: 865-574-7263; e-mail: xyn@ornl.gov. Please reference project #ORNL00-12 when applying for these positions. Applications will be accepted until the positions are filled. These programs are open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.

POSTDOCTORAL POSITIONS IN NEUROSCIENCE AND CARDIOVASCULAR MEDICINE

Three Postdoctoral positions are available to study the mechanisms of mechanosensory transduction in hair cells in transgenic mouse models. Two positions are available to study the molecular mechanisms of cardiac arrhythmia in animals and transgenic mouse models of cardiac hypertrophy and failure. Experience in electrophysiology, molecular biology, or biochemistry is required. Please forward your curriculum vitae and three references to the following: Ebenezer N. Yamoah, Ph.D., Department of Neurobiology; email: yamoahen@email.uc.edu or Nipavan Chiamvimonvat, M.D., Department of Medicine; e-mail: chiamvn@email.uc.edu.

> University of Cincinnati 231 Bethesda Avenue MSB, G410 Cincinnati, OH 45267-0521 FAX: 513-558-2002

POSTDOCTORAL POSITIONS (research-track positions for qualified candidates) available immediately for (1) study of effects of antipsychotic medicas tions on levels and phosphorylation of brain proteins (expertise in Western blot required; experience in ELISA desirable); and (2) investigation of neural circuits underlying taste analgesia. Expertise in *in situ* hybridization required (immunocytochemistry/tract tracing skills desirable). Contact: Dr. Michael S. Lidow, Department of OCBS, University of Maryland, HHH, 5–A–12, 666 West Baltimore Street, Baltimore, MD 21201. E-mail: mlidow@ umaryland.edu.

POSITIONS OPEN

INVESTIGATOR IN MOLECULAR AND FUNCTIONAL GENOMES RESEARCH IN AGING

University of Maryland and VA Medical Centers (GRECC), Baltimore

The Gerontology Division of the Department of Medicine seeks an accomplished M.D. or Ph.D. RE-SEARCH SCIENTIST in molecular and cell biology and functional genomes research. The position is in an interdisciplinary research program in gerontology, exercise and nutrition-related endocrine-metabolic, obesity, diabetes, and cardiovascular funded research. Academic rank, tenure status, and salary commensurate with experience. Reference Position #03-309-279; submit curriculum vitae and two academic references to: Andrew Goldberg, M.D., c/o JoAnn Gibbs, 22 South Greene Street, N3E10, Department of Medicine, University of Maryland, Baltimore, MD 21201. The University of Maryland, Baltimore, encourages women and minorities to apply and is an Affirmative Action/Equal Employment Opportunity/Americans With Disabilities Act Employer.

POSTDOCTORAL RESEARCH POSITIONS in vascular biology are available at the new Heart and Lung Institute at The Ohio State University, Columbus, Ohio. The positions are available for research programs investigating molecular mechanisms of vascular cell signaling and vascular disease. Applicants should have expertise in molecular or cellular biology. The Heart and Lung Institute, which officially opens this summer, is a state-of-the-art institute with wellequipped imaging and molecular CORE facilities. Salaries and associated benefits will be commensurate with experience. Qualified applicants should contact or send their curriculum vitae and names of three references to: Nicholas A. Flavahan, Ph.D., Associate Director, Heart and Lung Institute, The Ohio State University, 420 West 12th Avenue, Fifth Floor, Columbus, OH 43210. E-mail: flavahan-I@medctr.osu.edu.

ASSISTANT DIRECTOR/IDENTITY TEST-ING: National Legal Laboratories, Inc. (NIL), a division of Lifecodes Corporation, conducts DNA testing in disputed parentage and relationship cases for state child support offices and private individuals. Position involves data analysis and case review. Assist in development and upgrading of laboratory procedures, quality control, and quality assurance. Interact with clients regarding results, questions concerning genetics, and occasionally provide expert witness testimony. Ph.D. in genetics or related biological field is required. Experience with DNA-based testing is desirable. Forward résumé to: NLL Human Resources Department, 2947 Eyde Parkway, Suite 110, East Lansing, MI 48823. FAX: 517-349-6879.

A POSTDOCTORAL POSITION is available at Indiana University School of Medicine in the field of human papillomavirus cell biology. Studies include viral pathogenesis, comparison of different HPV types on cellular gene expression, and effects of infection on the cornified cell envelope. Interested candidates should submit applications, including curriculum vitae, copies of publications, statement of research interests, and three letters of recommendation to: Darron R. Brown, M.D., Associate Professor of Medicine, Microbiology and Immunology, Indiana University School of Medicine, 435 Emerson Hall, 545 Barnhill Drive, Indianapolis, IN 46202. E-mail: darbrow@iupui.edu.

POSTDOCTORAL POSITION is available to study the interaction of toll-like receptors with iron transport proteins (Nramp1, Nramp2, and HFE) in macrophage-mediated resistance to mycobacterial diseases. Candidates must have a Ph.D. with expertise in immunology, cellular and molecular biology, and cell signaling pathways. Please send curriculum vitae and names of three references to: Dr. Bruce S. Zwilling, Department of Microbiology, The Ohio State University, 484 West 12th Avenue, Columbus, OH 43210.

Tenure Track or Tenured Investigator Clinical MR Spectroscopy of the Brain Mood and Anxiety Disorders Program National Institutes of Health

The Mood and Anxiety Disorders Program, in the National Institute of Mental Health, invites applications for a tenure track or tenured investigator position utilizing MR spectroscopy to study brain in humans and relevant animal models. The candidate must have demonstrated abilities to develop an outstanding, independent research program that is focused on development and application of state-of-the-art MRS techniques to study brain metabolism. Specific interests in the application of MRS to problems related to brain disorders is desirable. The successful candidate should have a Ph.D or M.D. degree and at least 3 years of postdoctoral experience with in vivo MRI/MRS techniques. Salary is very competitive and consistent with the level of experience of the candidate. Applicants should send a curriculum vitae, statement of research interests, and have six letters of recommendation sent by June 30, 2000 to:

Dr. Dennis Charney, Chair Search Committee for Clinical MR Spectroscopy NIMH, Bldg. 10, Rm. 4N-222 9000 Rockville Pike, Bethesda, MD 20892

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CENTER OF MARINE BIOTECHNOLOGY UNIVERSITY OF MARYLAND BIOTECHNOLOGY INSTITUTE BALTIMORE, MARYLAND

TENURE-TRACK FACULTY POSITION ASSISTANT PROFESSOR – FISH IMMUNOLOGY

The Center of Marine Biotechnology of the University of Maryland Biotechnology Institute invites applications for a tenure-track Assistant Professor position in fish immunology. The Center is seeking to broaden its research program to include a basic research laboratory focused on immune mechanisms of fish. The strong collaborative atmosphere at this and other Centers within the Institute will foster a highly interactive environment for the new faculty member in all aspects of fish aquaculture and related initiatives. The successful candidate is expected to develop a research program focused on basic and applied aspects of immune mechanisms of fish, with emphasis on molecular immunology and DNA vaccines. A Ph.D. degree with advanced post-doctoral training in the application of molecular/biochemical approaches to understanding humoral or cellular adaptive immunity is required. Candidates must demonstrate a strong research record, including the publication of seminal papers on the structure and/ or function of the fish immune system. Qualified applicants should submit a letter of intent, describing particular interests in this position, experience, overall qualifications, future plans and career goals, together with a detailed curriculum vitae, including a comprehensive list of publications and the names and addresses of at least three professional references

Salary: Commensurate with experience; however expected salary range is \$60,000-\$65,000.

Position Available: September 1, 2000. Applications: Applications should be sent to:

Chair, Fish Immunologist Search Committee Center of Marine Biotechnology 701 E. Pratt Street Baltimore, MD 21202

Closing Date: Application review will begin on July 1, 2000 and will continue until a suitable candidate is selected.

The University of Maryland Biotechnology Institute is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans and candidates with disabilities are encouraged to apply.

Tenure Track Investigator

Laboratory of Genetics National Institutes of Health

A tenure investigator is being sought who works in the field of functional genomics. This person will join an active group of people in the NIMH Laboratory of Genetics who are interested in complex traits and genomic research. Candidate must have a Ph.D and/or M.D. and an established record of scientific accomplishment documented by a strong publication record.

Preference will be given to applicants with: 1) 4 or more years of experience in developing and using expression array technology, 2) a strong background in molecular biology and mathematics, 3) familiarity with laboratory information systems, large databases, and data mining methods, and 4) knowledge of computer languages and programming.

Applicants should send a curriculum vitae, statement of research interests, and have three letters of recommendations from non-collaborators sent in by July 15, 2000 to: Chair, NIMH Functional Genomics Search Committee, Bldg. 36, Rm. 3D-06, 9000 Rockville Pike, Bethesda, MD 20892.

The National Institutes of Health is an equal opportunity employer

Director of Drug Discovery

NéoKimia is a young, exciting chemistry-based biotech company that has built a solid, proprietary technology platform around the integration of combinatorial and computational methods to design and synthesize unique libraries of conformationally defined molecules. We are seeking an outstanding, experienced individual to join our senior management team and assist in guiding the company as it embarks upon the next phase of its continuing growth.

Responsibilities

To plan and implement the strategy in drug discovery for the company. The successful candidate will provide clear direction for identification of appropriate biological targets in the selected therapeutic areas. This includes identification, evaluation and management of appropriate outside research collaborations and alliances as well as the initiation of internal discovery efforts. The Director of Drug Discovery will be expected to provide the leadership necessary for the successful development of the company's new pharmaceutical entities.

Qualifications

- Ph.D. or equivalent in Biochemistry, Medicinal Chemistry, or related life sciences discipline
- Five to ten (5-10) years of experience in the pharmaceutical or biotechnology industry with at least 2 years at the management level. The ideal candidate will have successfully managed a drug discovery project in a technically complex and competitive area.
- Scientific excellence as evidenced by authored publications and a successful
 record of R & D accomplishments. In addition, a proven ability to manage
 research projects and productive research collaborations is essential.
- · Exceptional oral and written communication skills

NéoKimia is located in scenic Eastern Quebec, a region renowned for its high quality of life and year-round recreational opportunities. Attractive personal tax incentives may be available for qualified candidates. Please contact us for prompt and confidential consideration: Human Resources – Job Code 1080, 3001, 12^c Avenue Nord, Sherbrooke, Quebec, Canada J1H 5N4 fax: 819-820-6841, e-mail: jobs@neokimia.com. Visit our web site: www.neokimia.com. Applications should be submitted before July 3, 2000.



Position Announcement Assistant Professor of Wildlife and Conservation Biology

The Department of Biology and Wildlife and the Institute of Arctic Biology (IAB) at the University of Alaska Fairbanks (UAF) seek an Assistant Professor for a tenure-track appointment in Wildlife Ecology and Conservation Biology. Applicants must have an earned Ph.D. in Wildlife Ecology, Conservation Biology, or a closely related discipline. Postdoctoral experience, a strong record of extramural funding, and the ability to supervise graduate students and to interact favorably with state and federal wildlife agencies are expected.

This position is 50% research with a teaching load of two courses per year. The successful candidate will teach a sophomore or junior level wildlife course, and develop and collaborate on graduate offerings The candidate must play an important role in maintaining the excel lence of our program in wildlife ecology and bring an innovative approach to our program. Preference will be given to applicants conducting quantitative research at the interface of theory and application, dealing with issues such as fragmented habitats and/or small populations, with interests in studying avian or terrestrial vertebrates. Numerous field stations and laboratory facilities are available at IAB to conduct research on captive and wild animals, including the Large Animal Research Station, Toolik Field Station, Spatial Ecology Laboratory, and the DNA Core Facility. Extensive collections of birds and mammals are available for study at the UAF Museum. The successful candidate will have the opportunity to interact and collaborate with faculty studying a diverse array of topics including plant-animal interactions, population, nutritional, and behavioral ecology, wildlife diseases, metapopulation dynamics, population genetics, landscape ecology and the conservation biology of birds and mammals

Applicants must have Ph.D. (post-doctoral experience preferred). Send complete curriculum vitae, statement of teaching philosophy, research interests, reprints of publications and four letters of reference to: Dr. R. Terry Bowyer, Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks, Alaska 99775-7000. Materials must be received by September 1, 2000.

NEW ENGLAND

New England Biolabs, a world leader in the manufacture and supply of reagents for Molecular and Cell Biology, has the following position available.

Research Assistant/Associate

Position available immediately to perform heterologous protein expression in yeast, and to develop yeast protein expression systems. Applicants should hold a BS or higher degree in Biochemistry, Molecular Biology, or a related field, and possess a broad experience in vector construction, protein over-expression and purification, and protein engineering. Experience in genetic and molecular techniques involving the yeasts Saccharomyces cerevisiae and Pichia pastoris is highly desired.

Send a resume and three references to: **Dr. Chris Taron.**

New England Biolabs, Inc. 32 Tozer Road Beverly, MA 01915

An Equal Opportunity Employer

Position Announcement

Population Geneticist

The Department of Biology and Wildlife and Institute of Arctic Biology at the University of Alaska Fairbanks seek a qualified candidate for a tenure-track Assistant Professor in Population Genetics (available 1 January 2001).

We expect that the successful applicant will develop a vigorous research program in the application of quantitative and molecular methods in studying contemporary patterns and dynamics of genetic variation within and among populations. The research program should complement departmental strengths in wildlife ecology, conservation biology, evolution, population biology, human health, or systematics.

We expect the successful candidate to develop an active extramurally funded research program, exploiting research opportunities in Alaska, potentially including collaborations with departmental faculty and state and federal agencies to address conservation issues in pristine and modified environments. Available facilities include: the Spatial Ecology Laboratory, Automated Sequencing and Genotyping Facility, large collections of frozen tissues at the UA Museum, animal quarters, the Arctic Region Supercomputing Center, and a modern greenhouse (http://mercury.bio.uaf.edu).

The assigned teaching component (one course in the first year and two courses/ year thereafter) will be a senior/graduate-level course in population genetics and other courses, possibly including general biology, genetics, or quantitative genetics, based on the needs of the department and the interests and expertise of the successful applicant.

Applicants must have a Ph.D. in Biology or related field (post-doctoral experience preferred). Materials must be received by 31 July 2000. Send complete curriculum vitae, statements of research and teaching interests, reprints, and three letters of reference to: Edward C. Murphy, Chair, Population Genetics Search, Department of Biology and Wildlife, University of Alaska Fairbanks, Fairbanks, Alaska, 99775. ffecm@uaf.edu (907) 474-7154, FAX (907) 474-6967. Women and minorities are encouraged to apply. The University of Alaska is an Equal Opportunity/Affirmative Action Employer and Educational Institution.

GLOBAL OPPORTUNITIES

A Biotech company in Proteomics is looking for a

Vice President of R&D

Position 3700

Multi-Kshore

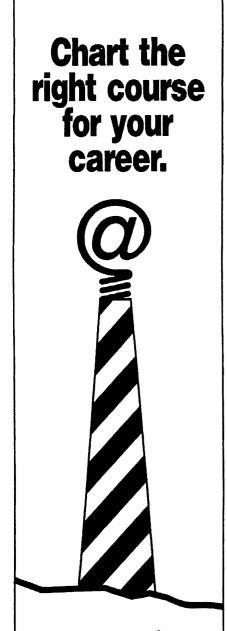
To lead it's R&D subsidiary in Israel

To fill this high caliber position in one of the hottest areas of biotech you should have the following credentials:

- A Ph.D. and a post doc in Biochemistry / Chemistry / Molecular biology obtained at reputable institutions.
- **1**0 years experience in managerial positions in R&D.
- Experience in functional geonomics, proteomics, protein chemistry or biochemistry and with relevant techniques, including 2D gel-electrophoresis, mass-spectrometry, etc.

You should be hard working, highly motivated and able to build, manage and motivate a world class R&D group. You will be expected to firmly establish the company's technology as an international leader in it's field. You will also be required to interact with leading scientists and present the company's technology in international forums. The successful candidate will participate in the company's strategic decision making process.

Please send your resume to fax no. (212)202-4112 or to E-mail: shiri.j@techworks.co.il



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Science Careers can help you navigate through the myriad career options with its fast, searchable jobs database and other useful career information.

Science Careers www.sciencecareers.org



Our challenge is life.

Aventis-Pharma is a leading innovation-driven company able to capture the high-growth opportunity of life sciences and committed to playing a major role in improving the quality of people's lifes, particularly by conquering disease through diagnosis, therapeutic vaccines and innovative medecines. We are now looking for

Director of Pathology

The successful candidate will join our Drug Safety Evaluation Department located just outside Paris, France, and will be responsible for managing the anatomic and clinical pathology laboratories. Other responsibilities will include preparation of annual budgets, hiring and allocation of personnel, reviewing and writing pathology and expert reports, and providing scientific consultations for Aventis-Pharma scientists and regulatory agencies. In addition, the Director of Pathology will oversee investigative studies to characterize the toxicity of new chemical entities or gene therapy products and to support drug discovery teams. Collaboration with Aventis-Pharma scientists in the US and Germany Drug Safety Evaluation groups is expected as well as participation in crossdepartmental project teams.

Qualified applicants should possess a D.V.M. or its equivalent, and be certified by the American or European College of Veterinary Pathologists or comparable organizations. Preference will be given to candidates in possession of a Ph.D. and who have demonstrated significant research experience in toxicologic pathology. A minimum of 8 to 10 years of pharmaceutical experience is required, including experience in drug development and management. Fluency in oral and written English is required and conversational French is desirable.

Head of Experimental Toxicology

The successful candidate will lead Experimental Toxicology within our Drug Safety Evaluation Department located just outside Paris, France. Within the Department, he will report to the Director of Toxicology and will be responsible for managing a multidisciplinary team. Other responsibilities will include preparation of annual budgets, hiring, allocation of personnel, establishment of strategies for the investigation of the mechanisms of toxicity or screening of early candidates, elaboration and follow-up of research programs conducted in-house or in collaboration with academic research laboratories. He will also act as a representative for Drug Safety Evaluation in the crossdepartmental project teams which are responsible for the development of new chemical entities or gene therapy products.

Qualified applicants should possess a Ph.D. in Toxicology, Pharmacology or a related field with at least 2 years of post-doctoral experience, a research experience in molecular biology and a substantive publication record in peer-reviewed literature. The successful candidate should have at least 5 years'experience in mechanistic-based toxicology, ideally gained within Pharmaceutical Industry. Experience in drug development and regulatory toxicology in the pharmaceutical industry is desirable. Board Certification from the American Board of Toxicology or a comparable European organization would be a plus. Fluency in oral and written English is required and conversational French is desirable.

Aventis-Pharma offers challenging multidisciplinary professional environment and a competitive compensation and benefits package.

If you wish to take advantage of these excellent opportunities, please send a full CV and covering letter detailing your experience and abilities to:

Nicole Faure, Aventis-Pharma, Drug Safety Evaluation Department, Zone D, 13 quai Jules Guesde, 94403 Vitry-sur-Seine Cedex, France.

POSTDOCTORAL POSITION (search extended) available immediately for a highly motivated individual to investigate the binding domains of coagulation factor Va for factor Xa. Ph.D. in biochemistry, cell biology, molecular biology, or related discipline required. Expertise in molecular/cell biology and cloning required. Experience in protein-protein interaction, protein chemistry, signal transduction, and protein purification desirable. Send curriculum vitae and bibliography; a brief statement of prior research experience; and names, telephone numbers, and e-mail addresses of four references to: Dr. Michael Kalafatis, Chemistry Department, Cleveland State University, 2351 Euclid Avenue, Cleveland, OH 44115. E-mail: m.kalafatis@csuohio.edu; Telephone: 216-687-2460; FAX: 216-687-9298. Cleveland State University is an Affirmative Action/Equal Opportunity Employer committed to nondiscrimination. Minorities/ Females/Disabled/Veterans encouraged.

POSTDOCTORAL POSITION available immediately for studying p53 tumor suppressor gene in mouse mammary tumorigenesis. Current project aims to characterize functional properties of p53 mutants *in vitro* and *in vivo*. Candidates should have a Ph.D. and a background in molecular biology and tissue culture. Experience with retroviral vectors and handling mice a plus. Send curriculum vitae, summary of research experience, and names of three references to: Dr. Janet S. Butel, Department of Molecular Virology and Microbiology, Baylor College of Medicine, MS: BCM-385, One Baylor Plaza, Houston, TX 77030-3498. E-mail: jbutel@bcm.tmc.edu. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP MOUSE GENETICS, CANCER GENE THERAPY, MOLECULAR BIOLOGY University of California, San Francisco, California

Postdoctoral position immediately available to characterize mouse models for tumors of the nervous system. Areas of research include model development, genetic mapping, MYCN target identification, and gene therapy. Send curriculum vitae and references to: William A. Weiss, M.D., Ph.D., University of California, 521 Parnassus Avenue, San Francisco, CA 94143-0114. E-mail: weiss@cgl.ucsf.edu.

POSTDOCTORAL POSITION available immediately in plant-mammal interactions to study how herbivores detoxify plant toxins and costs of detoxification. Requirements: Ph.D. and experience either in metabolic rate physiology, nutritional ecology, or pharmacology. Send curriculum vitae and three reference letters to: Dr. Denise Dearing, Biology Department, University of Utah, 257 South 1400 East, Salt Lake City, UT 84112. E-mail: dearing@ biology.utah.edu; website: http://herbivore. biology.utah.edu.

POSTDOCTORAL FELLOW

Successful candidate will study apoptosis in neurological and mitochondrial disorders. Applicants with expertise in molecular genetic techniques, gene therapy, and animal models are preferred. For confidential consideration, please e-mail or FAX curriculum vitae and three references to: Dr. Warren Lo; e-mail: low@pediatrics.ohio-state.edu or Dr. Long-Sheng; e-mail: lchang@chi.osu.edu. Department of Pediatrics, The Ohio State University and Children's Hospital. FAX: 614-722-2274.

The American Museum of Natural History is seeking a **POSTDOCTORAL FELLOW** for development of numerical and computational techniques in molecular phylogenetic analysis on a large Linux cluster. The successful candidate has a recent Ph.D. and two to three years of programming experience. Experience in parallel application development in bioinformatics and C, OCAML, and PVM desirable. This is a term position until May 30, 2001. Please submit research interests, curriculum vitae, and three references to **e-mail: wheeler@amnh.org**. Equal Opportunity Employer.

POSITIONS OPEN

The Department of Biochemistry at the University of Iowa has several positions available at the **POST DOCTORAL FELLOW** level for talented individuals interested in pursuing research in an active, collaborative environment. The Department is known for its strong research efforts in molecular biology and structural biophysics. For more information, see **web**site: www.biochem.uiowa.edu.

Areas of excellence include: chromatin, transcriptional regulation, and development (Geyer, Price, Weeks, Wallrath); DNA electrophoresis (N. Stellwagen); translational and posttranslational processing (Cohen, Donelson, Fulton, Rubenstein); signal transduction, cell cycle and DNA replication, and organelle trafficking (Deschenes, Weismann, Wold); protein crystallography (Arnone, Ramaswamy); protein dynamics and bioenergetics (Murphy, Plapp, Robertson, Shea, E. Stellwagen, Tobacman); and glycoproteins and lipid structure and function (Montgomery, Spector).

Applicants should hold a Ph.D. in biochemistry, biophysics, genetics, molecular biology, or a related field. Interested applicants should send or e-mail curriculum vitae and names of three references to: Dr. Pamela Geyer, Department of Biochemistry, University of Iowa, Iowa City, IA 52242. E-mail: pamela-geyer@uiowa.edu. The University is an Aftirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

POSTDOCTORAL POSITION IN GENOMICS/BIOINFORMATICS CASE WESTERN RESERVE UNIVERSITY

Position available immediately in analysis of largescale data sets from DNA microarray and SAGE experiments. Opportunity to interact with wide variety of projects as manager of our multiuser core analysis facility. Candidate should have Ph.D. in bioinformatics or biostatistics or Ph.D. in a biomedical science with strong background in biostatistics. Individual will train in genomic studies, developing and working with statistical algorithms to deal with the large dimensionality and complexity that is inherent in gene expression data, with Drs. Sunil Rao and John Porter. Send curriculum vitae and names/contact information for three references to: Dr. John D. Porter, Ophthalmology, University Hospitals of Cleveland, 11100 Euclid Avenue, Cleveland, OH 44106-5068 U.S.A. E-mail: jdp7@po.cwru.edu. Case Western Reserve University/United Hospitals of Cleve-land is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN DEVELOPMENTAL GENETICS

A NIH-funded Postdoctoral position is available for studying the coordination of signal transduction pathways using *Drosophila* ovarian development as a model (*Genes and Dev.* 12:1166-1175; *PNAS* 96: 11889-11894). Familiarity with *Drosophila* methods is preferred but not essential. Outstanding Postdoctoral Fellows will be encouraged to develop independent projects and be assisted in rising to the faculty rank. Send curriculum vitae and names and addresses of three references to: Dr. Tien Hsu, Center for Molecular and Structural Biology, Medical University of South Carolina, 86 Jonathan Lucas Street, Charleston, SC 29425 U.S.A. FAX: 843-792-3940; e-mail: hsut@musc.edu.

POSTDOCTORAL POSITIONS are available immediately to study the mechanisms and function of signal transduction activated by seven transmembrane receptors. The laboratory uses various molecular and cell biological, biochemical, and transgenic approaches in the study of signaling pathways with emphasis on those activated by chemokines and Wnt (*Science* 287: 1046; *EMBO J.* 18:4233; *JBC* 274:30419). Selfmotivated individuals trained in molecular and cellular biology, genetics, and/or biochemistry are encouraged to apply. Send curriculum vitae and letters of recommendation to: Dr. Dianging Wu, Department of Genetics and Developmental Biology, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3301. E-mail: Dwu@neuron.uchc.edu.

POSITIONS OPEN

POSTDOCTORAL/PREDOCTORAL POSI-TIONS in cardiovascular molecular biology. One Postdoctoral and two Predoctoral slots on one of the longest active NHLBI training grants in cardiovascular molecular biology. Studies provide experience in transgenics, knockouts, and mouse heart physiology; electrophysiology; gene treatment strategies; and heart failure. Special attention to preparation for carers in academics or industry. Track record is excellent. For Postdoctoral position, Ph.D. and/or M.D. required. Laboratories located in state-of-theart cardiovascular research center. Contact: Dr. Arnold Schwartz, Professor/Director, Institute of Molecular Pharmacology/Biophysics, University of Cincinnati Cardiovascular Center, Cincinnati, OH 45267-0828. E-mail: schwara@email.uc.edu; Telephone: 513-558-2400; FAX: 513-558-1778; website: http://www.med.uc.edu/cardio_bio. University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. For all positions, permanent U.S. residency is required for this program.

POSTDOCTORAL POSITION

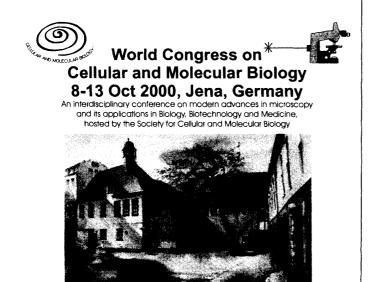
A Postdoctoral position is available immediately in the Mycobacteria Research Laboratories (MRL) at Colorado State University to develop new animal models of experimental drug therapies, particularly as they relate to chronic or latent/dormant tuberculosis. The successful candidate will have a Ph.D. with background in microbiology, and experience in anti-infectives of pathogenic organisms is desirable. The MRL has state-of-the-art facilities including a new 12,000 square foot ABL-3 building. Interested candidates should send a letter of interest, curriculum vitae, and the names of three references to: Mrs. Jenny Harding, Department of Microbiology, Colorado State University, Fort Collins, CO 80523. E-mail: jharding@lamar.colostate.edu. Colorado State University is an Equal Opportunity/Affinative Action Employer.

Two **POSTDOCTORAL POSITIONS** available immediately, one to study the effect of stress-activated proteins on the activity of anticancer drugs by modulating chromatin structure and one to study the interaction of p53 with calcium-binding proteins. Expertise in protein biochemistry and molecular biology is preferred; background in chromatin studies and/or tumor suppressor genes is desirable. The initial appointment will be for two years. Please send résumé and the names of three references to: Dr. France Carrier, School of Medicine, Biochemistry and Molecular Biology Department, University of Maryland, Baltimore, 108 North Greene Street, Baltimore, MD 21201-1503. E-mail: fcarr001@ umaryland.edu.

POSTDOCTORAL POSITION is available immediately for a recent Ph.D. to work in the area of biochemistry/molecular biology and bioinformatics of selenium-containing proteins. We offer outstanding research environment and competitive compensation. Please forward your curriculum vitae, contact information for three references, and a letter of interest to: Dr. Vadim Gladyshev, Department of Biochemistry, The Beadle Center, University of Nebraska, Lincoln, NE 68588. E-mail: vgladyshev1@unl. edu.

POSTDOCTORAL POSITION is available immediately to study presynaptic ligand-gated ion channels using patch clamp recording and confocal imaging. Applicants preferably should have experience in electrophysiology. Please send curriculum vitae and the names of three references to: Robert A. Nichols, Ph.D., Department of Pharmacology and Physiology, MCP Hahnemann University, 3200 Henry Avenue, Philadelphia, PA 19129. E-mail: robert. nichols@drexel.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION available. Position will involve the study of heart development during vertebrate embryogenesis, utilizing mouse and frog model systems. Please send curriculum vitae and names of three references to: Dr. Sylvia Evans, Department of Medicine, 0613–C, University of California San Diego, La Jolla, CA 92093. Telephone: 858-822-2452; FAX: 858-534-8081; e-mail: syevans@ucsd.edu.



Main Topics

Novel Techniques in Microscopy, FISH/DNA Imaging, Multiphoton Microscopy, Single Molecule Detection, Neuronal Networks, Apoptosis, Laser Tweezers, Nanosurgery, Microphotochemistry, Video Microscopy, 3D Imaging Invited Speakers include: W. Arber, Basel; G. Blobel, New York; C. De Duve, Brusselles; I. Giaever, Bergen; R.P. Haugland, Eugene; R. Huber, Munich; K.W. Kroto, Brighton; J.M. Lehn, Strasbourg; H. Michel, Frankfurt M.; F. Murad, Houston; T. Ried, New Haven; R. Rigler, Stockholm; H. Schneckenburger, Ulm; D. Weiss, Rostock Abstract submission by July 15th 2000. For further information, registration, and abstract submission see: http://www.ul-jena.de/wccmb/ Institute for Anatomy II, Teichgraben 7, 07743 Jena, Germany, Phone +49 (0) 3641 938550, Fax +49 (0) 3641 938552, email wccmb@uni-jena.de/ EUROPEAN OPPORTUNITIES

UNIVERSITY OF HOHENHEIM

The Faculty III, Agronomy I is seeking a professor for



Bioinformatics (C3)

The successful candidate will be responsible for both research and teaching the relevant courses which include biometry.

The applicant should be interested in introducing the methods of bioinformatics into the interdisciplinary research tasks of modern agricultural, food and bio sciences. Collaboration within the planned "life science center" and other central research institutions at the University of Hohenheim are expected.

Required qualifications are the habilitation or other comparable scientific references. The University of Hohenheim wants to increase the quota of scientific women. Women are therefore strongly encouraged to apply. Please send your application to the following address until July 20th, 2000: **Dean of Faculty III**, **University of Hohenheim**, **70593 Stuttgart**, **Germany**.

EUROPEAN OPPORTUNITIES



St George's Hospital Medical School University of London

HOTUNG CHAIR OF MOLECULAR VACCINOLOGY

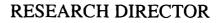
Applications are invited for the recently endowed Hotung Chair of Molecular Vaccinology. This exciting development in the Department of Infectious Diseases is well supported with £1.5m start-up costs, two scientific appointments, secretarial support and running costs. It will complement existing research on vaccines at St George's, and will provide a molecular biology approach to the development of human vaccines for evaluation, ultimately in the established Clinical Vaccine Institute in the Department.

Applicants should have an international reputation in molecular biology as applied to the development of vaccines.

Further information on http://www.sghms.ac.uk/, from the Personnel Office, St George's Hospital Medical School, Cranmer Terrace, London SW17 ORE, 020 8725 5020 (24-hour answerphone) or email: personnel@sghms.ac.uk Closing date 18 July 2000. Please quote reference 342/00.

The School is an Equal Opportunities Employer

TYNDALL CENTRE FOR CLIMATE CHANGE RESEARCH



The University of Eost Anglio (UEA) seeks to appoint a Research Director, at senior professorial level, of the newly announced Tyndall Centre, the national UK centre for interdisciplinary research on climate change. The Centre is based in the internationally-renowned School of Environmental Sciences at UEA, but involves a Consortium of nine UK higher education and research institutions. The Tyndall Centre aims to "further our understanding of the causes and consequences of global climate change and to identify, promote and facilitate sustainable solutions that will minimise the adverse effects of climate change and stimulate the transition to a more benign energy and mobility regime".

The Research Director will be a research leader of international stature. S/he will be: an innovative thinker demonstrating experience of, and commitment to, integrated research; a first-class communicator and teambuilder; oble to inspire and work effectively with scientific colleagues, business leaders and public decision-makers alike. The Research Director will have overall responsibility for the Centre, but will work closely with the Executive Director in fulfilling the Centre's objectives. Together they will be accountable to the funding bodies - three UK Research Council (Natural Environment Research Council, Economic and Social Research Council, Engineering and Physical Sciences Research Council) and the Department of Trade and Industry. The Research Director will be based at UEA, but is expected to travel widely within the UK and abroad.

Further particulars about the Tyndall Centre Consortium, the University of East Anglia and instructions for applicants are available from the Registrar and Secretary, University of East Anglia, Norwich, NR4 7J (answerphone: +44 (0)1603 593648, email: c.cook@uea.ac.uk). Please quote reference number AC321. For further information about the vision and operation of the Centre please contact the Executive Director, Dr Mike Hulme (tel: +44 (0)1603 593162; email: m.hulme@uea.ac.uk).

The closing date for applications is 21 July 2000 and interviews are provisionally scheduled for 19 September 2000. The appointment will be for an initial 5-year term and at senior professorial level. Salary will be commensurate with the importance and seniority of the appointment. The Centre is to be officially launched in October 2000 and the Director must be in post as soon as possible thereafter.

UEA is committed to excellence in education and research.

POSTDOCTORAL POSITION available to study the eukaryotic RNA polymerase II holoenzyme (visit laboratory website: www2.umdnj.edu/ ~huangsu/woychiklab.html). The laboratory is part of a dynamic scientific community on a shared campus with Rutgers University, located in a suburban setting 20 miles from New York City. Salary is competitive and commensurate with experience. Send curriculum vitae and contact information for three references to: Dr. Nancy Woychik, Department of Molecular Genetics and Microbiology, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. FAX: 732-235-5037; e-mail: woychina@umdnj.edu. University of Medicine and Dentistry of New Jersey is an Affirmative Action/ Equal Opportunity Employer

POSTDOCTORAL POSITION

Postdoctoral position available to study axon guidance and the extracellular matrix. Research projects involve using the *C. elegans* model system to characterize genes that regulate nerve development. In addition, ongoing collaborations with other laboratories at Robert Wood Johnson Medical School and Rutgers are used to study vertebrate homologs. Send curriculum vitae and cover letter to: William Wadsworth, Ph.D., Department of Pathology, Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. E-mail: wadswort@umdnj. edu. University of Medicine and Dentistry of New Jersey is an Affirmative Action/Equal Opportunity Employer; Minorities/ Females/Disabled/Veterans.

POSTDOCTORAL RESEARCH OLIGODENDROCYTE LINEAGE CELLS

A two-year appointment is offered at a competitive salary, and continuation is possible with program development. Applications include CNS myelination and/or remyelination. The position is intended for a Postdoctorate building a career in CNS stem cell biology or regeneration. Experience is required in cell identification techniques such as immunocytochemistry and *in situ* hybridization. Contact: **Richard Wiggins**, **Professor of Anatomy**, **West Virginia University School of Medicine**, **P.O. Box 9128**, **Morgantown**, **WV 26505**. *West Virginia University is an Affinnative Action/Equal Opportunity Employer*.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION is available to study the regulation of gene expression and signal transduction by oxidative stress and glutathione. The project involves analysis of microarray and yeast two-hybrid data. Applicants should have a Ph.D, M.D., or equivalent degree and a strong background in cellular and molecular biology. Please send curriculum vitae with three references to: Michael W. Lieberman, M.D., Ph.D., Department of Pathology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. FAX: 713-798-6001; e-mail: mikel@bcm.tmc.edu. Baylor College of Medicine is an Equal Opportunity/Affirmative Action / Equal Access Employer.

LERNER RESEARCH INSTITUTE CLEVELAND CLINIC FOUNDATION

POSTDOCTORAL POSITION available immediately to investigate the mechanism of protein kinase A targeting by A-kinase anchoring proteins in the heart and in heart failure. We seek a candidate with strong quantitative skills and a background in physics or biophysics. Experience with fluorescence techniques, especially FRET, is preferred. Please send curriculum vitae and names of three references to: **Dr. Meredith Bond; e-mail: bondm@ccf.org.**

POSTDOCTORAL or RESEARCH ASSIST-ANT PROFESSOR to work on positional cloning of blood pressure quantitative trait loci in rats (website: www.mco.edu/depts/physiology/research/index. html). Experience with techniques of molecular biology required. Send curriculum vitae to: Dr. John Rapp, Department of Physiology and Molecular Medicine, Medical College of Ohio, 3035 Arlington Avenue, Toledo, OH 43614-5804. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGICAL MASS SPECTROMETRY RESEARCH/TEACHING POSTDOCTORAL POSITION AT GRINNELL COLLEGE

Grinnell College is seeking a Postdoctoral-level CHEMIST or BIOCHEMIST with research interests in biological mass spectrometry and a strong interest in undergraduate liberal arts education. This unique two-year position is funded through an AIRE grant from National Science Foundation and requires U.S. citizenship. The successful candidate will be expected, in collaboration with one or more Grinnell College faculty members, to participate in an ongoing research program involving undergraduates. Research equipment includes an electrospray ion trap mass spectrometer and a new 400 MHz NMR. Research projects involve the use of mass spectrometry for biomolecule structure determination, including noncovalent complexes. The successful candidate will also be involved in teaching and curricular development for a new interdisciplinary biological chemistry major. Potential teaching opportunities are available in introductory, organic, or physical chemistry areas. Questions may be addressed to: Elaine Marzluff, Department of Chemistry; Telephone: 515-269-4314; FAX: 515-269-4285; e-mail: marzluff@grinnell. edu. Information about Grinnell College and faculty research programs is available at website: http:// www.grinnell.edu. Applicants should submit curriculum vitae; a brief description of past, current, and planned research interests; and a statement describing their philosophy of undergraduate education and long-range career plans along with a list of references and copies of transcripts to: Elaine Marzluff, Department of Chemistry, Grinnell College, Grinnell, IA 50112. To be assured of consideration, all materials should be submitted by June 26, 2000. Grinnell College is an Equal Opportunity/Affirmative Action Employer committed to employing a highly qualified staff, which reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender sexual orientation, marital status, religion, creed, or disability.

POSTDOCTORAL RESEARCH ASSOCIATE. Candidates should be proficient in molecular biology, particularly focused in cloning and gene expression. The project addresses control of glucose transporter gene expression through alterations in the stability of the mRNA. We are particularly interested in identifying stability control sequences in the message as well as proteins that serve as ligands for these sequences. Candidates must have a Ph.D. in biochemistry or a related science. Please forward curriculum vitae and three letters of reference to: Dr. Phillip H. Pekala, Department of Biochemistry, The Brody School of Medicine, East Carolina University, Greenville, NC 27858-4354. Alternatively, applications and letters of reference may be sent by e-mail to: pekalap@mail.ecu.edu. Applications will be accepted until the position is filled. Proper documentation of identity and employment and official transcripts required at time of employment. East Carolina University is an Equal Opportunity / Affirmative Action Employer and as such encourages applications from minorities and women and accommodates individuals with disabilities.

POSTDOCTORAL FELLOW position for biology Ph.D. with experience in genetics, molecular biology, computer-aided instruction, and/or demonstrated creative approaches to instruction in biological sciences. Responsibilities: Develop and coordinate laboratory course to complement general genetics course; instruct general genetics; seek extramural funding for innovative genetics education research; and engage in other scholarly activities, with primary responsibility in genetics instructional program. Position available on a 12-month basis starting August 15, 2000, through August 15, 2003. Annual base salary: \$25,000. By July 1, 2000, please submit curriculum vitae, transcripts, statement of teaching philosophy and plans for scholarly activities, and three letters of reference to: Dr. Marie W. Wooten, Auburn Uni-versity, Department of Biological Sciences, 331 Funchess Hall, Auburn, AL 36849. E-mail: mwwooten@ag.auburn.edu.

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWSHIP

A Postdoctoral position is available within the Heritable Disorders Branch (HDB), National Institutes of Child Health and Human Development (NICHD), National Institutes of Health (NIH), to study the gene therapy of dominant genetic bone disorder by hammerhead ribozymes. We have developed a knockin mouse model for nonlethal osteogenesis imperfecta that is being used to approach gene therapy by suppression of mutant mRNA. Project involves in vitro, in cellulo, and murine investigations, including development of transgenic mice expressing ribozymes and expression constructs to increase colocalization and efficiency.

A strong background in molecular biology and experience with murine models is desired. Candidates should have a Ph.D. or M.D. and less than five years of postdoctoral experience. Interested applicants should send curriculum vitae and three references to: Dr. Joan Marini, Heritable Disorders Branch, NICHD, Building 10, Room 9S241, 10 Center Drive, MSC-1830, Bethesda, MD 20892; FAX: 301-402-0234; e-mail: oidoc@helix.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION MOLECULAR BASIS OF FACIOSCAPULO-HUMERALMUSCULAR DYSTROPHY Program in Molecular Medicine University of Massachusetts Medical School

Defining the genes associated with and controlling muscle cell dysfunction. Application of novel cloning strategies and functional analysis of genes involved in muscle dystrophic process. Ideal candidate will have a background in molecular biology, biochemistry, and cellular biology. Send curriculum vitae and three references to: Dr. Rossella Tupler, Department of Biochemistry and Molecular Biology, University of Massachusetts Medical School, 373 Plantation Street, Suite 309, Worchester, MS 01605. FAX: 508-856-5473; e-mail: rossella.tupler@ umassmed.edu. An Equal Opportunity/Affirmative Action Employer.

Two **POSTDOCTORAL POSITIONS** with **T. W. Sturgill** in cellular signaling available now for either the regulation and function of downstream MAP-KAP kinases by MAP kinases or the enzymology and function of Target of Rapamycin (TOR) kinase in cancer. Both mammalian and yeast systems in use; either background appropriate and especially welcomed would be protein biochemists. Send curriculum vitae and three references (e-mail and telephone numbers) to: **T. W. Sturgill, Box 800577, Health Sciences Center, Department of Pharmacology, University of Virginia, Charlottesville, VA 22908, E-mail: tws7w@virginia.edu**. The University of Virginia is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

This position is available immediately to study regulation and functions of RNA polymerase II transcription factor TFIIH. Functions of TFIIH are involved in regulation of transcription, cell cycle, and DNA repair. Applicants should hold a Ph.D. or M.D., and experience in biochemistry and cell biology is preferred. Send curriculum vitae and letters of reference to: Hiroaki Serizawa, Ph.D., Department of Biochemical and Molecular Biology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7421. E-mail: hserizaw@kumc.edu; FAX: 913-588-7004.

Computational neuroscience: **POSTDOCTORAL FELLOW** to investigate the dynamical properties of nonlinear systems with a particular emphasis on information processing and storage in gene networks and molecular pathways. Applicants should send a letter of application, curriculum vitae, and names of three references to: **Dr. John H. Byrne, Department of Neurobiology and Anatomy, The University of Texas-Houston Medical School, Houston, TX 77030.** Affirmative Action/Equal Opportunity Employer.

SEED INSTITUTE RESEARCH POSITIONS

We seek outstanding candidates for **POSTDOC-TORAL POSITIONS** investigating the genetics and molecular biology of seed development, including embryogenesis, apomixis, endosperm development, and female gametophyte differentiation. Research will be conducted as part of the Seed Institute, an institute without walls. Seed Institute principal investigators include: Gary Drews (University of Utah), Robert Fischer (University of Califor-nia Berkeley), Robert Goldberg (UCLA), John Harada (University of California Davis), and Jack Okamuro (University of California Santa Cruz). The Seed Institute is a collaborative effort between university laboratories and Ceres Inc., a Malibu-based plant genomics company. Successful candidates will join one of the academic laboratories and interact closely with all other laboratories in the Institute. Applicants should send their curriculum vitae, statement of research interests, and the names of three references to: Professor Bob Goldberg, Department of MCD Biology, University of California, Los Angeles, CA 90095-1606. E-mail: seed. institute@mcdb.ucla.edu.

POSTDOCTORAL POSITION IN NEUROSCIENCE

NIH-funded Postdoctoral position is available at The Salk Institute for Biological Studies to identify the neural pathways that control testicular activity. The project focuses on the use of PRV tracing methodology and brain microsurgery. Candidates should have a recent Ph.D., a strong background in neuroanatomy and tracing methods, and be familiar with surgical techniques in rodents.

Send curriculum vitae and three letters of recommendation to:

> Catherine Rivier Professor The Salk Institute 10010 North Torrey Pines Road La Jolla, CA 92037 FAX: 858-552-1546 E-mail: CRivier@salk.edu

Equal Opportunity Employer.

POSTDOCTORAL POSITION IN RNA BIOGENESIS Yale University School of Medicine

Our laboratory studies how RNA molecules are folded, processed, assembled with proteins, and sorted within cells. We use genetics and biochemistry in both yeast and mammalian cells to examine the functions of RNA-binding proteins that play important roles in these processes (see Genes and Dev. 14:777-782; EMBO Journal 19:1650-1660; EMBO J. 17: 7442-7453; Cell 89:393-402). Candidates should possess a recent Ph.D. degree and have experience in genetics, biochemistry, or molecular biology. Please send curriculum vitae, a brief summary of research experience, and the names of three references to: Dr. Sandra L. Wolin, Departments of Cell Biology and Molecular Biophysics and Biochemistry, Howard Hughes Medical Institute, Yale University School of Medicine, 295 Congress Avenue, New Haven, CT 06536.

Position available for SENIOR RESEARCH SCIENTIST/POSTDOCTORAL FELLOW in Division of Clinical Biochemistry and Human Metabolism. Ph.D. with very strong background in molecular biology required. Must have experience in transcription, transfection, *in situ* hybridization, sitedirected mutagenesis, transgene/knockout methodology/DNA microarray techniques, etc. Interest in vascular biology and atherosclerosis desirable but not essential. Interested applicants should write: I. Jialal, M.D., Ph.D., Director, Division of Clinical Biochemistry and Human Metabolism, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, CS3.114, Dallas, TX 75390-9073. E-mail: jialal.i@pathology.swmed.edu. Equal Opportunity Employer.

GLOBAL OPPORTUNITIES

CHAIRMANSHIP AND FACULTY POSITIONS, LIFE SCIENCE DEPARTMENT NATIONAL CENTRAL UNIVERSITY (NCU) Taiwan

The College of Science of NCU is seeking applications for Chairman and faculty positions of the Life Science Department, which has nine faculty members in environmental biology and biotechnology. Ten more new positions are to be filled and new research areas expect to be added in the next few years. The qualified applicants for Chairmanship should be born after July 31, 1941, with the academic rank of FULL PROFESSOR or equivalent; should have excellent records in scientific research; and experience in scientific administration. Please submit curriculum vitae, publication list, published work of the past three vears, a proposal for the future development of the Department, and three letters of recommendation by September 30, 2000, to: Professor Wing-Huen Ip, Chair, LSDC Search Committee, Dean of Science Office, National Central University, Chung-Li 320, Taiwan. Telephone: 886-3-422-7151, ex-tension 5000; FAX: 886-3-422-1210; e-mail: wingip@jupiter.ss.ncu.edu.tw. The applicants for faculty positions should have at least two years of postdoctoral research experience and scientific background in genetics, plant biology, or microbiology. Applicants with research experience related to environmental biology and with teaching experience are welcome. Please submit the same materials plus a research proposal by September 30, 2000, to: Faculty Recruiting Committee, Life Science Department, National Central University, Chung-Li 320, Taiwan. FAX: 886-3-422-8482; e-mail: ncu5050@ ncu.edu.tw.



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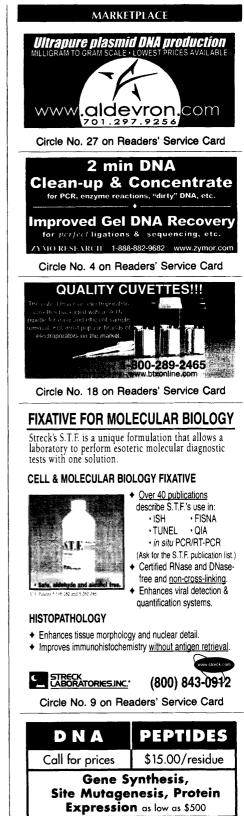
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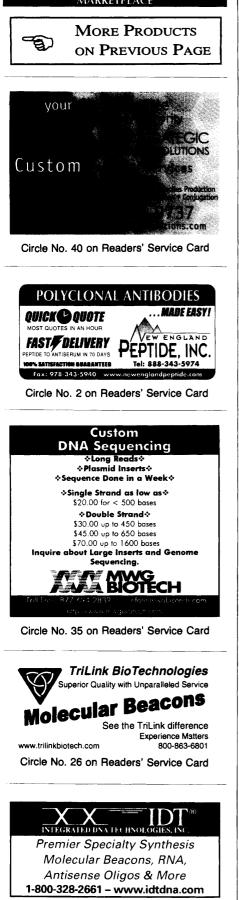
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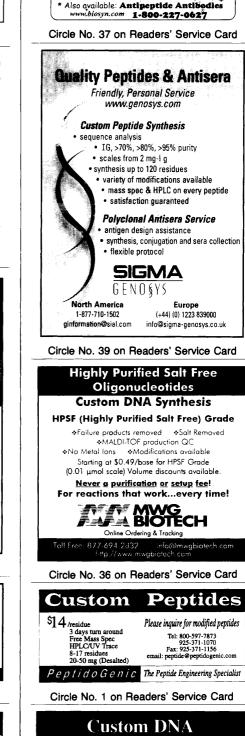
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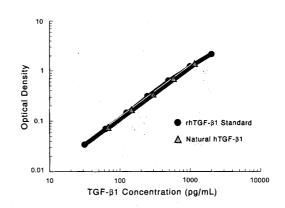
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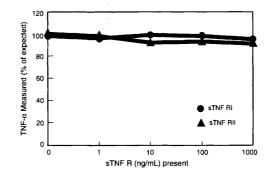


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TNF- α was measured in the Human TNF- α ELISA (Cat # DTA50) in the presence or absence of sTNF RI or sTNF RII. Results demonstrate that neither receptor positively or negatively interferes with the measurement of TNF- α .

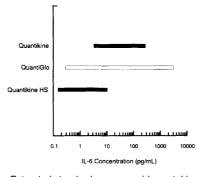
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- Results in 5 to 6 hours
- · Increased sensitivity



Extended standard range provides cytokine quantitation that encompasses both the Quantikine and Quantikine HS colorimetric levels.



North America R&D Systems, Inc. McKinley Place NE Minneapolis, MN 55413, USA Tel: 612 379-2956 Free: 1-800-343-7475 Fax: 612 379-6580 info@rndsystems.com

R&D Systems Europe Ltd. 4-10 The Quadrant, Barton Lane Abingdon, OX14 3YS, UK Tel: +44 (0)1235 529 449 Free: 0800 37 34 15 Fax: +44 (0)1235 533 420 info@rndsystems.co.uk

Germany R&D Systems GmbH Borsigstrasse 7 65205 Wiesbaden, Germany Tel: +49 (0)6122 90980 Free: 0800 909 4455 Fax: +49 (0)6122 909819 infoambh@rddsystems.co.uk

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Europe Free Phone Belgique/België: 0800 10 468 614 Danmark: 80 01 85 92 France: 0800 90 72 49 Nederland: 060 225607 Norge: 800 11033 Sverige: 020 79 31 49 Switzerland: 0800 55 2482



