

NEW PRODUCTS

Catalyst 4.7 Accelrys

San Diego, CA
Contact company for pricing
858-799-5000
www.accelrys.com/catalyst

DRUG DISCOVERER

Catalyst provides an integrated environment for visualizing, testing hypotheses, and performing database analyses relating to drug discovery. It has an intuitive visualization interface that integrates seamlessly with databases and calculation engines with the use of several modules.

Catalyst/VISUALIZER, the visualization interface module, is based on a chemistry stockroom metaphor of the daily workbench of a chemist. There are four program workbenches: View Compound, which allows building or modification of molecules in several molecular structure formats, as well as conformation generation; View Database, which permits the searching of corporate and virtual databases; View Hypotheses, which permits users to build hypotheses; and Generate Hypothesis, which is used to build three-dimensional (3D) pharmacophore models.

The Catalyst/COMPARE module uses geometric features and functional capabilities of two structures to help determine the degree of similarity between them. It can predict the activity of a compound from a user's hypotheses, and it ranks the predicted activities for various conformations and mappings.

Catalyst uses the Catalyst/ConForm module to generate multi-conformational 3D structures used as inputs in pharmacophore modeling and database searching. The module uses two approaches, "best" and "fast." The best method performs a rigorous search through the energetically accessible conformational space. The fast method permits rapid building of a large number of conformations for finding a quick match to a certain hypothesis.

Catalyst/DBServer is the search engine-server that provides advanced information retrieval and analysis functions. Search queries can be performed to identify structurally diverse leads in database collections, such as CAP, ACD, BioByteMasterFile, Derwent, etc. Catalyst/INFO allows the user to build 3D multiconformational databases. It reads molecules in SMILES, MOL, and SD formats, and it can build the conformational models in parallel across multiple servers, multiple CPUs, or a combination of servers (LINUX, AIX, and IRIX). It also creates indices for fast and efficient searching. Catalyst/DBLibrary allows the building of large, virtual and real combinatorial libraries derived from Markush templates (RG files). The generated databases contain fully enumerated structures with 3D multiconformations and topological and geometrical indices.

Catalyst comes with a complete set of searchable online and printed documentation, including detailed tutorials, online help, and a brief UNIX overview. Advanced users will find detailed descriptions and default values of parameters that control import and export of data, conformer generation algorithms, style of on-screen graphics, and user interface options.

Catalyst 4.7 provides a seamless integration between various modules and is an efficient and reliable database-driven drug discovery environment. The program is available for SGI IRIX 6.5.10 or higher version of the operating system. This release also provides the server application that can run on Intel-based machine running RedHat Linux 6.2 or AIX 5.11.

—Satyam Priyadarshy and Pavel Simakov

The authors are with DaVinci Press, Corvallis, OR 97330, USA. E-mail: satyam@priyadarshy.com (S.P.); psimakov@outplay.com (P.S.)

Upchurch Scientific

For more information
800-426-0191
www.upchurch.com
www.scienceproductlink.org

NANOPORTS FOR LABS-ON-CHIPS

New NanoPort Assemblies provide consistent connections for lab-on-a-chip devices, connecting 360 μm , 510 μm , and 1/32-inch OD tubing. Made from inert, biocompatible

PEEK polymer and perfluoroelastomer, the connections add no additional volume to the fluid path, eliminating dead volume traditionally associated with chip-based fluid connections.

Zymark

For more information
508-497-6541
www.zymark.com
www.scienceproductlink.org

384-ARRAY PIPETTE TIPS

New 25- μl volume, 384-array pipette tips are available for the SciClone Advanced Liquid Handler. They are available in both sterile and nonsterile forms, in racked or nested

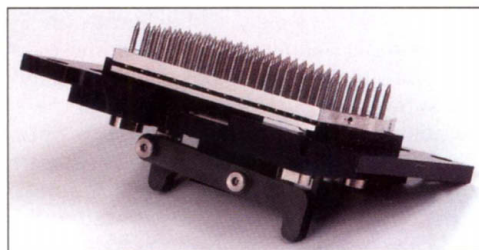
formats. They join the successful 100 μl and 200 μl Tempo Pipette Tips in providing convenience and accuracy. The Tempo Pipette tips can also be used with the Twister, Twister II, and RapidPlate 96/384 Workstation.

Beckman Coulter

For more information
800-742-2345
www.beckmancoulter.com
www.scienceproductlink.org

HIGH-DENSITY REPLICATION TOOL

A High-Density Replication (HDR) tool for the transfer of submicroliter volumes on the Biomek FX Liquid Handling System is suitable for primary and secondary screening applications, compound transfer, and cell-based assays. It can also perform plate replication without the use of a traditional pipettor. In either a 96- or 384-pin configuration, the HDR tool can array multiple spots in a single plate well. Each pin can also be removed to create patterns for glass slide microarrays. The Biomek FX gripper functions with the HDR tool in place, allowing on-the-



fly worksurface configurations. Because different liquid types can affect transfer volumes, pins to the HDR tool are available in three shapes and two diameters—0.015 inch and 0.045 inch—allowing users to fine-tune configurations for specific liquids. Accessories, including circulating reservoirs and drying fans, clean the tool between each transfer to prevent cross-contamination.

Millipore

For more information
800-MILLIPORE
www.millipore.com
www.scienceproductlink.org

MICROVOLUME PIPETTE TIPS

The ZipTip pipette tip family is suitable for purifying and concentrating femtomoles of peptides or proteins in seconds, prior to mass spectrometry, high-performance liquid chromatography, capillary electrophoresis, and other analytical tech-

CONTINUED ON PAGE 1200

niques. ZipTip_{SCX} pipette tips concentrate and purify peptides from solutions containing acetonitrile. The strong cation exchange resin also removes nonionic and zwitterionic detergents from peptide solutions. They can be used with Millipore's Montage In-Gel Digest₉₆ Kit to eliminate the dry-down step and speed up the in-gel digestion process. The ZipTip_{μ-C18} configuration is compatible with the Packard MultiPROBE II and Micro-mass MassPREP liquid handling systems. As little as 1.2 ml can be eluted onto a matrix-assisted laser desorption ionization-time of flight target in the presence of matrix.

Upchurch Scientific

For more information

800-426-0191

www.upchurch.com

www.scienceproductlink.org

NANOMIXER

Suitable for combining two flow streams, the NanoMixer makes use of hyperdiffusion between flow laminae to achieve superior mixing with minimal turbulence. Well-

sited for sub-microliter flow rates, it also supports up to 500 μl per minute and is pressure-rated to 1500 psi (103 bar). The silicon chip-based NanoMixer features unique technology for direct connection of 360 μm OD tubing. It has a flow-path volume as low as 30 nl.

BD Biosciences

For more information

800-343-2035

www.bd.com

www.scienceproductlink.org

RED FLUORESCENT PROTEIN

HcRed is a novel far-red fluorescent protein. HcRed can be multiplexed with other fluorescent proteins, expanding the user's options for expression studies. Because it fluoresces in the far-red region of the spectrum, it provides a high signal-to-noise ratio and avoids the effects of cellular auto-fluorescence.

NanoDrop Technologies

For more information

302-764-4976

www.nanodrop.com

www.scienceproductlink.org

SMALL VOLUME SPECTROPHOTOMETER

The NanoDrop ND-1000 Spectrophotometer makes ultraviolet/visible light spectrophotometry easy and accurate for 1 μl samples.

The device's design eliminates cumbersome cuvettes and capillaries. The user simply pipettes the sample directly onto the measurement surface. Through surface tension, the sample is drawn into a column between the ends of two optical fibers to create the measurement path. After the measurement, the user simply wipes the sample off and loads the next sample. The sample handling mechanism is integrated with a xenon flash lamp and charge-coupled device-array to achieve a photometric range of 0.02 to 50 absorbance from 220 to 750 nm. The unit is particularly suited to measuring nucleic acid sample concentration and quality from 1 to 3000 ng/μl (without dilution) and for measuring microarray sample fluorescent dye labeling density. The instrument is operated over a USB connection to a personal computer.

Brinkmann Instruments

For more information

800-645-3050

www.brinkmann.com

www.scienceproductlink.org

FEMTOJET FOR MICROINJECTION

The Eppendorf FemtoJet 5247 Microinjector is suitable for the injection of liquids into adherent cells and suspension cells. The FemtoJet offers simple operation, refined

technology, and practical features. Combining an integrated compressor with a wide pressure range and finely regulated pressure parameters (injection pressure, injection time, and compen-

sation pressure), it offers high productivity while maintaining precision and reproducibility. It offers an intuitive, easy-to-read LCD display, space-saving dimensions, and a computer interface for fully automated microinjection.

Ambion

For more information

800-888-8804

www.ambion.com

www.scienceproductlink.org

REAL-TIME PCR REAGENTS

Real-time polymerase chain reaction (PCR) is a powerful quantitative tool, but the cost of reagents is much higher than that of standard PCR consumables. Ambion now offers an economical alternative to the high cost of PCR reagents for the ABI 7700 and other 0.2-ml tube-based real-time instruments.

SuperTaq Real-Time includes a high-performance Taq polymerase and all necessary optimized reagents for SYBR Green, TaqMan, and Molecular Beacon chemistries.

Beckman Coulter

For more information

800-742-2345

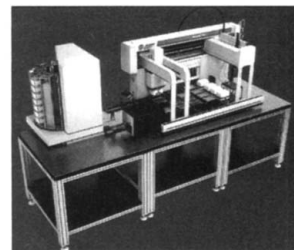
www.beckmancoulter.com

www.scienceproductlink.org

ASSAY WORKSTATION

The Biomek FX Assay Workstation is a new system for automation of enzyme-linked immunosorbent assays and homogeneous biological assays. The workstation offers flexi-

bility, modularity, and easy-to-use software in a compact package. Components include a variety of reader technologies, a Bio-Tek microplate washer, and a unique Reservoir Automated Labware Positioner (ALP). A Kendro Microplate Hotel provides labware directly to the Biomek FX via a new Shuttle ALP.



Syngene

For more information

+44 (0) 1223 727123

www.syngene.com

www.scienceproductlink.org

LITERATURE

ChemiGenius²: An Advanced System for All Fluorescence and Chemiluminescence Imaging is a 12-page brochure that details the camera, darkroom, and software features of

this system. The new capabilities improve speed and accuracy. A section on applications of the system includes examples of chemiluminescent blots, protein gels, and DNA gels of varying sizes, stained with several different types of stains as well as examples of automated colony and cell counting.

Pierce

For more information

800-874-3723

www.piercenet.com

www.scienceproductlink.org

Western Blotting with Chemiluminescent Substrates: A Handbook for Beginners; A Troubleshooting Guide for Pros and Products for Blotting are two handbooks that contain full-length and abbreviated protocols,

tips on antibody and blocking buffer optimization, a chemiluminescent substrate selection guide, a procedure for stripping and reprobing protein immunoblots, tips on clearer film development, and other information.

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 manufacturer or supplier by visiting www.scienceproductlink.org on the Web, where you can request that the information be sent to you by e-mail, fax, mail, or telephone.

Classified Advertising

For full details on advertising rates, deadlines, mechanical requirements, and editorial calendar go to

www.sciencecareers.org

and click on

How to Advertise

UNITED STATES

Display Classified Advertising

Bren Peters (Midwest and Mid-Atlantic)

PHONE: 202-326-6541

Kathleen Clark (Southeast and Canada)

PHONE: 202-326-6555

Jill Steinberg (Northeast)

PHONE: 914-834-8733

Kristine von Zedlitz (West Coast)

PHONE: 415-956-2531

FAX: 202-289-6742

E-MAIL: science_displayads@aaas.org

Line Classified Advertising

Christina Geiger

PHONE: 202-326-6532

Sussy Castilla

PHONE: 202-326-6740

FAX: 202-289-1451

E-MAIL: science_classifieds@aaas.org

Online Classified Advertising

Beth Dwyer (Internet Sales Manager)

PHONE: 202-326-6534

FAX: 202-289-6742

E-MAIL: bdwyer@aaas.org

AD MATERIALS: Send to:

Science Classified Advertising,
1200 New York Avenue, NW, Room 911,
Washington, DC 20005

EUROPE

Display, Line, and Online

Classified Advertising

Deborah Harris

PHONE: +44 (0) 1223 326 500

FAX: +44 (0) 1223 326 532

E-MAIL: european_ads@science-int.co.uk

AD MATERIALS: Send to:

Science International, Advertising Dept.,
Bateman House, 82-88 Hills Road,
Cambridge CB2 1LQ, United Kingdom

MEETINGS / ANNOUNCEMENTS

Kathleen Clark

PHONE: 202-326-6555

Richard Walters

PHONE: +44 (0) 1223 326 527

To subscribe to Science

call 202-326-6417

or 1-800-731-4939

POSITIONS OPEN



FACULTY POSITIONS IN BIOMEDICAL SCIENCE

The USC/Norris Comprehensive Cancer Center of the Keck School of Medicine at the University of Southern California is undergoing a major expansion and seeks applicants for faculty positions at the **ASSISTANT, ASSOCIATE, and FULL PROFESSOR** level in biomedical sciences. Areas of particular interest include but are not limited to chromatin structure, apoptosis, virology, signal transduction, angiogenesis, transcription, cancer immunology, structural biology, DNA repair, replication, and methylation. The positions are to be filled starting in November 2002 and thereafter. All applicants should send curriculum vitae, research plan, and names of three references to: **Dr. Peter Jones, Director, USC/Norris Comprehensive Cancer Center, 1441 Eastlake Avenue, Los Angeles, CA 90089-9181. USC is an Equal Opportunity Employer.**

FACULTY POSITION Cancer Cell Biology and Molecular Pharmacology Cancer Research Center of Hawaii University of Hawaii

The Cancer Research Center of Hawaii, an NCI-designated cancer center at the University of Hawaii at Manoa, invites applications for two tenurable positions as **ASSISTANT/ASSOCIATE PROFESSOR**. Individuals with research interests in cancer biology or molecular pharmacology are sought to establish an independent research program related to fundamental biological mechanisms of cellular growth and novel molecular targets such as apoptosis, angiogenesis, or signal transduction, which will complement ongoing molecular research efforts in the Center. Successful applicants will be expected to collaborate with researchers in the Natural Products program, a multidisciplinary drug discovery group aimed at the identification and characterization of new anticancer agents through the use of mechanism-based assays. Minimum requirements: M.D. or Ph.D. degree and a strong record of published research. Desirable: demonstrated interest in the identification and use of novel anticancer agents in the elucidation of key cellular processes involved in tumor biology. Salary commensurate with qualifications and experience. To apply, send letter of application, curriculum vitae, statement of current and future research interests, and the names and addresses of three references to: **Robert V. Cooney, Ph.D., Assistant Director, Cancer Research Center of Hawaii, 1236 Lauhala Street, Honolulu, HI 96813. Telephone: 808-586-2968; e-mail: personnel@crch.hawaii.edu; website: http://www.crch.org.** Closing date: Position will remain open until filled; however, first review of applications will begin October 15, 2002. *Equal Employment Opportunity/Affirmative Action Employer.*

CHEMISTRY FACULTY TENURE TRACK Massachusetts Institute of Technology (MIT) Department of Chemistry

The Department of Chemistry invites applications for tenure-track positions in inorganic chemistry, organic chemistry, and experimental and theoretical physical chemistry beginning July 2003. Appointment is at the rank of **ASSISTANT PROFESSOR**. Outstanding individuals with a strong commitment to research and teaching are encouraged to apply by arranging to have curriculum vitae; a brief description of research plans; and three letters of recommendation sent to: **Professor Stephen J. Lippard, Head, Department of Chemistry, 18-399, Massachusetts Institute of Technology, Cambridge, MA 02139-4307 by October 15, 2002.**

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

POSITIONS OPEN

LANDSCAPE ECOLOGY, ASSISTANT PROFESSOR, tenure track. The University of Alaska Anchorage Environmental Studies program and Department of Biological Sciences seek an Assistant Professor of landscape ecology and environmental studies to contribute to its teaching, research, and service missions by focusing on northern ecosystem processes and management issues. Responsibilities include teaching interdisciplinary environmental studies courses at all levels and teaching one to two courses per year in biological sciences and landscape ecology. Conduct research relevant to Alaskan or circumpolar lands or marine ecosystems. Contribute vigorously to the Environmental Studies program through advising, university service, and intellectual outreach. The position is tenure track, full-time nine month: 40% teaching, 40% research, and 20% service. Additional summer assignments are possible.

Qualifications include Ph.D. in landscape ecology or closely related field, strong GIS skills, ability to teach landscape ecology and interdisciplinary environmental studies courses in collaboration with other faculty, and ability to build and sustain a collaborative research program focused on the North. Strong publication record preferred.

For more information about the position, contact: **Professor Steve Colt; Telephone: 907-786-1753; e-mail: afsge@uaa.alaska.edu.**

To apply, candidates must submit a cover letter (please note PCN number 301590); curriculum vitae; statement of research experience and interests; statement of teaching experience and philosophy relative to the position; University of Alaska Application Form Page One (required); Page Two (optional); transcripts; and a list of names, addresses, telephone numbers, and e-mail addresses for three professional references to:

**University of Alaska Anchorage
Human Resource Services
North Residence Hall, Room 117 (drop box)
3211 Providence Drive (by mail)
Anchorage, AK 99508-8136
Telephone: 907-786-4608; TTY: 907-786-1420
FAX: 907-786-4727**

Review of applications will begin November 1, 2002, and will continue until the position is filled. Further information and the required UAA Application Form can be found at website: **http://www.finsys.uaa.alaska.edu/uaahrs.**

ECOLOGY FACULTY POSITION

The Department of Biological Sciences at Vanderbilt University seeks candidates to fill a **TENURE-TRACK FACULTY** position in ecology. Specific areas of interest include behavioral, chemical, community, and evolutionary ecology. The central criteria for this position are excellence in research and the ability to teach undergraduate and graduate students with a high level of effectiveness. For information about the Department, please visit our website: **http://www.biosci.vanderbilt.edu.** Applicants should send a letter of application together with curriculum vitae, a statement of current and future research interests, teaching evaluations if available, and selected reprints to: **Ecology Search Committee, Department of Biological Sciences, Vanderbilt University, VU Station B 351634, Nashville, TN 37235-1634 U.S.A.** Applicants should also arrange for three letters of recommendation to be sent to the same address. Review of applications will begin October 1, 2002, and will continue until the position has been filled. *Vanderbilt University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.*

FACULTY SEARCH M.D.

The University of Sint Eustatius, School of Medicine, on the island of Sint Eustatius in the Dutch Caribbean, has an opening for an M.D. to be Dean of Basic Science. Interested parties should reply with curriculum vitae and references to: **C. Frank Chambers, M.D., Chairman of the Search Committee; e-mail: drchambers@eustatiusmed.edu; Telephone: 202-903-5881.**



Icagen is a privately held biopharmaceutical company dedicated to discovering novel therapeutics, which act via ion channel modulation. The Company integrates a comprehensive human ion channel gene collection with computational chemistry approaches allowing rapid identification of drug candidates. Programs at Icagen include internal discovery projects, collaborations with large pharma, and clinical trials. Several opportunities exist to join Icagen for exceptional individuals.

Head of Molecular Sciences (Job Code: MOBIO073102)

A unique opportunity exists for the right person to lead Icagen's molecular sciences effort related to ion channels. The successful candidate will contribute to key decisions regarding selection and validation of ion channel targets for different therapeutic indications. Broad experience and expertise in gene cloning, expression analysis, vector construction, and mammalian cell expression of ion channels are required along with a comprehensive understanding of ion channel biology. Preference will be given to candidates with experience in technologies, which explore ion channel expression and who also have an understanding of the relationship between molecular characterization of channels and drug discovery. Candidates should have a Ph.D. or equivalent and a minimum of 3 years experience following a postdoctoral fellowship. They should have established a high level of recognition in the scientific community and possess excellent communication and team building skills.

Senior Scientist - Electrophysiology (Job Code: EP073102)

This position offers the opportunity to play a key role in advancing drug discovery projects. The successful candidate will work closely with the molecular, HTS, chemistry and pharmacology groups to characterize new ion channel targets and identify small molecule modulators of these channels. The position requires a broad-based knowledge of ion channel biophysics and the ability to work with channels from many different gene families. Strong expertise with biophysical analysis, patch-clamp and other electrophysiological techniques are required. Preference will be given to candidates studying ion channels related to pain or inflammation. The candidate should possess excellent verbal/written communication skills and be enthusiastic about working in a team environment. Educational requirements include a Ph.D. or equivalent in the life sciences and 2 or more years of post-doctoral experience.

Senior Scientist - Molecular Biology (Job Code: MOSC073102)

The successful candidate for this position will be involved in applying state-of-the-art techniques to select, express and validate ion channel targets for drug discovery. The candidate should be very well versed in using electronic databases to access information on ion channel genes and possible disease associations. Strong bench skills are also required including cloning, expression analysis and vector design. Significant experience working with ion channel genes is essential. The candidate should possess excellent verbal/written communication skills and be enthusiastic about working in a team environment. Educational requirements include a Ph.D. or equivalent in the life sciences and 2 or more years of post-doctoral experience.

Icagen provides a comprehensive compensation and benefits package including competitive salaries, stock options, medical and dental plans, and a 401(k) retirement plan. For consideration, please submit your resume or CV and salary history directly to:

Human Resources

ICAGEN, Inc.

P.O. Box 14487

Research Triangle Park, NC 27709

Email: jobs@icagen.com

Please include the appropriate job code with your cover letter.

ICAGEN, Inc. is an Equal Opportunity Employer.



City of Hope

BECKMAN FELLOWS PROGRAM

**Postdoctoral Research Fellowships
Beckman Research Institute of the City of Hope**

The prestigious Beckman Fellows program, established by the Arnold and Mabel Beckman Foundation, provides support and resources for postdoctoral fellows to develop rapidly into independent investigators. The fellowship is designed for beginning or advanced postdoctoral fellows with strong records of accomplishment, who have a clear sense of direction and/or a novel idea they wish to develop in collaboration with one or more City of Hope investigators.

Two fellows will be selected in the current competition. Each will be provided a **salary of \$55,000 per year and a research allowance of \$55,000 per year** for supplies, equipment, travel and/or technical support. Fellowships are renewable for three years.

For applications and eligibility requirements please visit
the Beckman Fellows Web site:
<http://beckmanfellows.coh.org>.

For a list of potential mentors and their research interests, please visit:
<http://bricoh.coh.org> and go to Divisions and Programs.

Application Deadline: October 15, 2002

*City of Hope is an Equal Opportunity/Affirmative Action Employer.
Women, minorities, veterans and disabled persons are encouraged to apply.*

BIOTECHNOLOGY APPLERA CORPORATION

At Applera Corporation, including Applied Biosystems, Celera Diagnostics, Celera Genomics, Perceptive, and Paracel, we're committed to ensuring that biological information plays a pivotal role in the future of medicine and the well-being of humankind. From genomic information to instrument systems, we enable science for life. We are currently recruiting at all levels for the following positions in various locations including Foster City, San Jose, South San Francisco, Alameda, Pasadena, and Pleasanton, CA; Santa Fe, NM; Houston, TX; Boston, Bedford, Framingham, MA; and Rockville, MD.

- **SCIENTISTS, CHEMISTS, ENGINEERS, SOFTWARE ENGINEERS, RESEARCH ASSOCIATES, SYSTEM ARCHITECTS, DATABASE TECHNOLOGISTS:**
DNA sequencing projects, research, development, QA, test, genetic analysis, bioinformatics, and molecular microbiology.
- **SCIENTIFIC OPERATIONS MANAGERS**
- **SCIENTISTS MANAGERS**
- **SPECIAL PROJECTS MANAGERS**
- **SR. DESIGN SPECIALISTS (DATA WAREHOUSING)**
- **ASSOCIATE PRODUCT MANAGERS**
- **SALES ENGINEERS**
- **FIELD SUPPORT & FIELD SERVICE ENGINEERS**
- **SOFTWARE MARKETING SPECIALISTS**
- **SERVICE TRAINING SPECIALISTS**
- **PRODUCT APPLICATIONS SPECIALISTS, Proteomics and Mass Spectrometry**
- **FIELD APPLICATIONS SPECIALISTS**
- **MASS SPECTROMETRY SALES & SERVICE SPECIALISTS**
Sales and market development for protein analysis instrumentation products.

Regional positions: Illinois, Missouri and Midwestern States; Colorado and Rocky Mountain States; California and Western States, Texas and the Southwestern States; North Carolina and Eastern States; Massachusetts, Maryland and Northeastern States

Interested candidates should send their resumes to: **Applera Corporation, Human Resources Department, 850 Lincoln Centre Drive, Foster City, CA 94404. FAX: 650-638-6738.** For more information on these and other career opportunities, visit our website: **www.abcareers.com**. Applera Corporation is an Equal Opportunity Employer and welcomes diversity in the workplace.

Cutting edge science driving the discovery of new medicine.

GlaxoSmithKline, a leading pharmaceutical Research and Development organization, has unique opportunities for outstanding Imaging Scientists to contribute to drug discovery.

We are building a Molecular Imaging Center of Excellence (MICE) within the Technology Development in GSK at our R&D site, in suburban Philadelphia. Initially, the center will house a 9.4 T/31 cm MRI system, a micro-PET with a plan to include other technologies such as micro-CT and optical imaging. The center will also include a state-of-the-art preclinical laboratory, an electronics shop and an image analysis laboratory. The major goals of MICE are to develop and integrate state-of-the-art imaging methods for different disease models to support pharmacological, biological, and genomic drug discovery programs

Currently, we are looking for people with expertise in the area of magnetic resonance imaging (MRI)/magnetic resonance spectroscopy (MRS), functional MRI (fMRI) and image processing and analysis. Working in this newly created Molecular Imaging Center of Excellence, you will invent, develop and/or implement MRI, MRS, and fMRI experiments, for pharmacological, biological, biochemical, and toxicological and transgenic phenotyping applications. You will also execute research projects in MR imaging and spectroscopy and functional MRI, particularly, though not exclusively in diagnosing disease processes and its response to drug therapy in disease models *in vivo*. The image analysis position will develop and implement algorithms and integrate them towards visualization and quantitative analysis of 2D and 3D images.

Principal Scientist/Investigator, MRI/MRS
Your Ph.D. in Chemistry, Physics, Biochemistry, Biomedical Engineering or in other relevant programs with a strong experimental background in current magnetic resonance imaging and spectroscopic techniques with relevant postdoctoral experience in the use of MR imaging and spectroscopy for *in vivo* studies is required. Experience with UNIX and/or Linux operating systems and image analysis and display software is a plus. (Req. ID 3486)

Principal Scientist/Investigator, MRI/fMRI
A Ph.D. in Chemistry, Physics, Biochemistry, Biomedical Engineering or in other relevant programs with a strong experimental background in current magnetic resonance imaging techniques including functional MRI with relevant postdoctoral experience in the use of MRI/fMRI for *in vivo* studies is necessary. Preference will be given to candidates with relevant experience in fast imaging techniques and their application to disease models. Experience with UNIX and/or Linux operating systems and image analysis and display software is a plus. (Req. ID 3488)

Principal Scientist/Investigator, Image Analysis
Your Ph.D. in Physics/Medical Physics/Biophysics, Computer Science, Biomedical/Electrical Engineering or in other relevant programs with a strong background in image processing and analysis is required, as is relevant postdoctoral experience in developing/implementing algorithms for the display and quantitative analysis of 2D and 3D images. Preference will be given to candidates with relevant experience in the analysis of MR images of disease models. Strong programming skills and fluency in UNIX and/or Linux operating systems is a definite plus. (Req. ID 3490)

GlaxoSmithKline is dedicated to an innovative work place and supports you with career long opportunities and learning. We offer a competitive benefit and compensation package. For confidential consideration and efficient processing of your resume, please visit our Web site at www.gsk.com. Indicating Req. ID is essential to search. Principals only, no agencies, please.

Developing talent through equality of opportunity MIF/DIV

If you are unable to visit our Web site, please call 1-888-493-6756.

Together we can make life better.



ANNOUNCEMENTS

Open Competition for Research



EUROPEAN COMMISSION
JOINT RESEARCH CENTRE

The Joint Research Centre (JRC) is calling for applications from European scientists to the COM/A/3/02 Competition for scientific research posts throughout its 7 Institutes. The deadline for receipt of such applications is 27 September 2002.

The JRC is a Directorate-General of the European Commission, providing science and technology advice to European policy makers. Please consult our website for further information: <http://www.jrc.cec.eu.int/>

It is a state-of-the-art Scientific Research and Technology Centre. It is fully involved in the European Research Area (ERA) - a true internal market for science and knowledge. The JRC is where world-class scientific progress and European policy take shape together. Through its scientific support, the JRC provides a solid and sound basis to the conception, development, implementation and monitoring of EU policies. It makes major contributions to food safety, chemical products and health, environment and sustainability as well as nuclear safety and security.

This specialised support is underpinned by competencies in generic activities such as technical foresight; reference materials and measurements; and public security and anti-fraud.

The opportunity to work at the JRC is a chance to learn and progress in the challenging and exciting environment of European scientific research. Working on projects in an environment of scientific excellence, candidates will benefit from high quality training to support their personal and professional development. In return for your commitment, the JRC offers flagship facilities, unique research tools and some of the most challenging and rewarding experiences to be found anywhere.

Details of the competition and application forms can be obtained

- by post: please post an unstamped envelope (23x32 cm) or self - adhesive label, bearing your name and address and stating the reference of the competition to the following address:
European Commission
Recruitment Policy Unit
MO 34 2/31
Open competition COM/A/3/02 (please specify)
B - 1049 Brussels
- by e-mail: inforecruitment@cec.eu.int
- or by fax: +322 295 74 88 or by telephone: +322 299 31 31



Ferring Research Institute Inc. (FRI Inc.) is the San Diego research division of the international pharmaceutical company Ferring Pharmaceuticals (www.ferring.com), an established company offering a leading portfolio of products and services in urology, obstetrics, and infertility. FRI is rapidly expanding its efforts to discover new treatment approaches in these and related therapeutic areas.

Research Scientist, In Vitro Pharmacology

The Research Scientist will perform assay development, high-throughput screening, lead optimization, and molecular pharmacology research to drive drug discovery. A Ph.D. and postdoctoral research experience in a relevant field are required with industrial molecular pharmacology experience preferred. The ideal candidate must have a strong record of research success, including extensive publication and strong oral and written communication skills. Research experience measuring ligand-receptor interaction is required, with a preference for GPCR binding assays including filtration-based and homogeneous assay formats. Research experience should also include second messenger signaling systems and functional cell-based assays for GPCR function. Molecular pharmacology experience is required, including testing drug responses and mechanisms of drug action. The quantitative analysis of molecular pharmacology data is required, including non-linear regression and other computational tools. Research experience in a high-throughput research setting is preferred, including working with luminescence-based and fluorescence-based assays, high-throughput data handling, and use of high-throughput automation.

Ferring Research Institute Inc. offers competitive compensation and benefits packages. Apply by sending a cover letter, resume and list of three references to: **Ferring Research Institute Inc., 3550 General Atomics Court, 2-442, San Diego, California, 92121, Fax: 858-455-3190 or email: jobs@ferring.com**

Assistant Professor Positions Florida State University

The Department of Chemistry and Biochemistry at Florida State University (<http://www.chem.fsu.edu>) is searching for five Assistant Professors in research areas that complement those of our present faculty members, for appointments beginning in Fall, 2003. These tenure-track positions are part of a \$75M enhancement to our Department, including a new \$46M research building. Of the five positions, one each is targeted for the Analytical, Inorganic, and Physical Chemistry Divisions. The remaining two positions are open to candidates in any of our present Divisions (including also Organic Chemistry and Biochemistry), as well as interfaces between the traditional disciplines and other areas of chemistry. We offer generous start-up packages and ample space in the Department's research facilities. In addition, collaborations with other research institutes and centers, such as the National High Magnetic Field Laboratory (<http://www.magnet.fsu.edu>), the Materials Research and Technology Center (<http://www.martech.fsu.edu>), Computer Science and Information Technology (<http://www.csit.fsu.edu>), and Programs in Molecular Biophysics and Structural Biology (<http://www.sb.fsu.edu>), are available where appropriate. We require a Ph.D. degree and one or more years of postdoctoral experience. Each successful candidate will be expected to teach at the undergraduate and graduate level, and develop a well-funded, internationally recognized research program. Please send a vitae, a brief description of research interests, and arrange for three letters of recommendation to be sent to:

**Faculty Search Committee
Department of Chemistry and Biochemistry
Florida State University
Tallahassee, FL 32306-4390**

Review of applications will begin on October 1, 2002, and continue until the positions are filled.

*The Florida State University is an Equal Opportunity Employer.
Women and minority candidates are particularly encouraged to apply.*



St. Jude Children's
Research Hospital
ALSAC • Danny Thomas, Founder

Postdoctoral Fellowships

Investigation of Knock-out Mouse Models Developmental Biology and Physiology of Lipid Metabolism

A postdoctoral position is available for a recent Ph.D. to participate in the development and analysis of knock-out mouse models in a new area of lipid metabolism. Gene expression will be studied in embryos and tissues using *in situ* hybridization and real-time PCR. The impact of altered tissue function will be studied in whole animals with the goal of reversing the metabolic imbalances with drugs. Investigation is focused on a new area of lipid metabolism. Applicants must have a solid background in a related scientific discipline and an interest in working with mice. Excellent salary and benefits, state-of-the-art animal facilities and opportunity for interaction with many expert collaborators are offered.

Cover letter, curriculum vitae and names of three references may be faxed to 901-495-3099; e-mailed to suzanne.jackowski@stjude.org; or mailed to the address below. Please include req.# SCI-1721 in your inquiry.

Dr. Suzanne Jackowski
Protein Science Division
Department of Infectious Diseases
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105

Development of Small Molecule Therapeutics

A postdoctoral position is available for a recent Ph.D. to participate in the development and optimization of methods for high-throughput enzymatic assays for identification of novel inhibitors and crystallization trials for protein structure determinations. Interaction with an established Protein Production Facility provides opportunity to obtain training in heterologous protein expression and purification. Interaction with collaborators in the Structural Biology department enables participation in protein structure determinations and virtual modeling for the design of small molecule inhibitors. Enzymes under investigation are primarily targets for antimicrobial drug development. Applicants must have a solid background in a related scientific discipline and a strong knowledge and interest in biochemistry. The position offers excellent salary and benefits, state-of-the-art facilities, and the opportunity to train with experienced, productive mentors in a multidisciplinary research group.

Cover letter, curriculum vitae and names of three references may be faxed to 901-495-3099; e-mailed to suzanne.jackowski@stjude.org or charles.rock@stjude.org; or mailed to the address below. Please include req.# SCI-1720 in your inquiry.

Dr. Suzanne Jackowski & Dr. Charles O. Rock
Small Molecule Therapeutics Program
Department of Infectious Diseases
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105

St. Jude is an equal opportunity/affirmative action employer.
www.stjude.org



Deutsches
Krebsforschungszentrum
Stiftung des öffentlichen Rechts
in der Helmholtz-Gemeinschaft

Universität
Heidelberg

The Deutsches Krebsforschungszentrum (DKFZ, German Cancer Research Center) and the Faculty of Medicine at the University of Heidelberg jointly offers a position for a

Full Professorship (C4) for Experimental Therapy of Malignant Tumors (No.: 82/2002)

The successful candidate will be head of a research division at the Deutsches Krebsforschungszentrum.

Applicants should have made outstanding scientific contributions especially in the fields of molecular genetic developments for gene therapy, molecular effects of drugs and cytokines, and/or drug development and evaluation.

The ability to develop new molecular concepts for cancer therapy, and to transfer these in cooperation with clinicians to clinical application is expected. Furthermore, cooperation with divisions of the DKFZ, especially within the Research Program "Diagnostics and Experimental Therapy" is desired.

We are seeking outstanding candidates, and strongly encourage applications from women.

Initial assignments for a full professorship are generally limited to a period of three years, with an optional tenure track position to follow.

Please submit your application including a CV, list of publications, and references, by latest 15 September 2002 to: Prof. Dr. H. zur Hausen, Deutsches Krebsforschungszentrum, Im Neuenheimer Feld 280, D-69120 Heidelberg, Germany.



Faculty Positions in Chemical and Structural Biology

The Institute for Cellular and Molecular Biology
Department of Chemistry and Biochemistry

The Institute for Cellular and Molecular Biology and the Department of Chemistry and Biochemistry invite applications for tenure track faculty positions at a rank commensurate with experience. Researchers who study nucleic acids or nucleic-acid protein interactions, and use X-ray crystallography as a research tool, are particularly encouraged to apply. Exceptional candidates in other areas will also be considered. The successful applicants will be expected to develop an aggressive research program, to participate in undergraduate and graduate education, and to contribute to a dynamic and interactive academic atmosphere. Chemical and Structural Biology are areas of emphasis within the Institute for Cellular and Molecular Biology headed by Dr. Alan Lambowitz. Exceptional start-up packages are available. Austin is located in the Texas hill country and is widely recognized as one of America's most beautiful and livable cities.

Candidates should submit a current curriculum vitae and a summary of research experience and future goals, together with at least three letters of recommendation. To assure full consideration applications should be received by October 18, 2002. Material should be sent to:

Dr. Jon Robertus
Chair of the Search Committee
Department of Chemistry and Biochemistry
The University of Texas at Austin
Austin TX 78712

Homepages • <http://www.icmb.utexas.edu> • <http://www.cm.utexas.edu>

*The University of Texas at Austin is an Equal Opportunity Employer
Qualified women and minorities are encouraged to apply*



Applications are invited for a position at the rank of Assistant Professor. The Department of Biochemistry at the Vanderbilt University School of Medicine is a multi-disciplinary department, including faculty belonging to the following Centers: Vanderbilt-Ingram Cancer Center, Center for Structural Biology, Center in Molecular Toxicology, Center for Molecular Neurosciences, Diabetes Center, and Clinical Nutrition Unit. While all areas of modern molecular biochemistry will be considered, preference will be given to individuals studying regulatory mechanisms, including, but not limited to: receptor-mediated signaling, gene expression, proteolysis, and the cell cycle. Applications are also encouraged from individuals using genomic, proteomic, or bioinformatic approaches. Links to information about the Department, current faculty research interests, the search committee, Vanderbilt University, and Nashville can be found at: <http://medschool.mc.vanderbilt.edu/biochemistry>.

Interested applicants must have completed a Ph.D. and/or M.D. degree as well as postdoctoral training. Applications must be received by November 1, 2002. Submit a curriculum vitae, statement of research interests, and three letters of recommendation either electronically or by mail to the following address:

**Marlene Jayne
Search Committee
Department of Biochemistry
607 Light Hall
Vanderbilt University
Nashville, TN 37232**

or electronically to marlene.jayne@Vanderbilt.edu

FACULTY POSITION

The University of Health Sciences-College of Osteopathic Medicine invites applications for an Assistant Professor faculty position that is available immediately. Qualified candidates must have a Ph.D. in biomedical sciences, biochemistry or related areas, molecular / cell biology expertise, and postdoctoral research and teaching experience. A successful candidate will be expected to develop and maintain a funded proteomics-based research program in the areas of cancer, cardiorespiratory diseases, neurology or aging. The candidate must also have a strong commitment to teaching/advising medical students & University service.

Salary will be commensurate with experience and qualifications. UHS offers an outstanding benefits package including an exceptional retirement plan. UHS is located in a beautiful, traditional setting near downtown Kansas City, MO. Please send a letter of interest, curriculum vitae, a brief statement of teaching and research interests, and contact information for three references to: **Susan M. Schmidt, Assistant Director of Human Resources, University of Health Sciences, 1750 Independence Ave., Kansas City, MO 64106-1453; or E-mail: employment@uhs.edu (MS Word); or fax: 816-283-2285. www.uhs.edu** Review of applications will continue until the position is filled. Specific questions may be directed to Douglas R. Rushing, Ph.D., Search Committee Chair, 1-800-234-4847, ext. 2205; or 816-283-2205. Please visit www.kclifesciences.org for additional information on metropolitan initiatives.



the University of Health Sciences

EOE

[illegible]

Science @
CAREERS

The search stops here.

- career advice
- e-mail job alerts
- graduate programs
- job postings

www.sciencecareers.org



**SCIENTIFIC DIRECTOR FOR THE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
NATIONAL HUMAN GENOME RESEARCH INSTITUTE
DIVISION OF INTRAMURAL RESEARCH**

The National Human Genome Research Institute (NHGRI), a major research component of the National Institutes of Health (NIH) and the Department of Health and Human Services, seeks an outstanding scientist to lead its Division of Intramural Research (DIR), located at the National Institutes of Health in Bethesda, Maryland. The Scientific Director, NHGRI/DIR, leads a program aimed at deciphering the genetic contributions to common and rare disorders, in order to provide a better understanding of diseases such as cancer, diabetes, heart disease, as well as less common conditions. The 530 scientists and support personnel in NHGRI/DIR have consistently been at the forefront of scientific innovation, developing a variety of research approaches that have accelerated the understanding of the molecular basis of disease. The Scientific Director will have responsibility for an annual budget of approximately \$85 million. In addition to providing scientific and administrative leadership that will maintain NHGRI/DIR's position as one of the premier research centers in the world, the Scientific Director will be expected to carry out independent laboratory research in genetics and/or genomics.

The applicant must be a scientist with a national and international reputation for excellence, possessing a Ph.D., M.D., or equivalent degree, in a biomedical or related field. The applicant must have a broad knowledge of the field of human genetics and genomics, and a compelling vision for the future of the field. The Scientific Director will be responsible for creating and maintaining a nurturing research environment that facilitates and encourages creativity, collaboration among scientists from different disciplines, effective training of students and postdoctoral fellows, and efficient utilization of common resources. The ability to develop productive interactions among NHGRI faculty, other NIH institutes, and the genetic research community at large is critical. The applicant must be able to serve as a spokesperson for NHGRI/DIR research to science professionals and the general public. The Scientific Director will also be responsible for the recruitment and professional development of tenure-track faculty and the retention of current faculty members, in order to maintain the high quality of science for which NHGRI/DIR is known. The applicant must have proven experience in directing and managing a scientific research program, with well-honed administrative and interpersonal skills to meet the demands of both research and program direction.

Interested applicants should send their curriculum vitae and bibliography, and the names and addresses of four references. Applications should be sent to: **Beverly S. Mushinsky, Human Resources Specialist** by fax (301)402-4831 or e-mail: beverlym@exchange.nih.gov. The closing date for this position is: **September 15, 2002**. For more information on NHGRI's Intramural Research Program, please see <http://www.genome.gov>.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, political affiliation, marital status, disability, age, sexual orientation, or membership/non-membership in an employee organization.



The HHS and NIH are Equal Opportunity Employers.



**Forschungszentrum Karlsruhe
in der Helmholtz-Gemeinschaft**



**RUPRECHT-KARLS-UNIVERSITÄT
HEIDELBERG**

The successful candidate will set up the protein crystallography group within the Institute of Toxicology and Genetics at Forschungszentrum Karlsruhe and will have the prime opportunity of access to the protein crystallography beamline at the ANKA synchrotron radiation source run by the Forschungszentrum. An intense interaction with the Institute of Synchrotron Radiation (<http://www.fzk.de/anka/>) and the Institute of Nanotechnology (<http://www.fzk.de/int/>) is desired as well.

Candidates who integrate optimally into the biological themes pursued at Forschungszentrum Karlsruhe (http://itgm1.fzk.de/www/itg/itg_home.html) will have priority.

Applications by women are particularly encouraged.

Forschungszentrum Karlsruhe, a major German national laboratory with 3,500 staff, is offering the position of the

Head Protein Crystallography Group.

The position includes an

Associate Professorship (C3)

at Heidelberg University, where he (she) will participate in teaching biochemistry (structural biology).

Web pages for further information: <http://www.fzk.de> and <http://www.uni-heidelberg.de>

Please send before September 30, 2002 your CV, list of publications (underlining the five most important ones) and a short outline of your future research objectives to

Professor Reinhard Maschuw
- Vorstand -
Forschungszentrum Karlsruhe GmbH
P.O. Box 3640
76021 Karlsruhe, Germany

Postdoctoral Opportunity Physical Biosciences Institute

Postdoctoral fellows interested in multidisciplinary cutting-edge research in the biosciences are sought to join the newly formed Lawrence Livermore National Laboratory (LLNL) Physical Biosciences Institute. The goal of this institute is to develop and apply new technologies for biophysical measurements leading to systems-level models of biological processes such as gene regulation, cellular homeostasis, and cell cycle control. In this position you will work as an integral member of a larger group with expertise in single molecule spectroscopy, nanofabrication, confocal and atomic force microscopy, accelerator mass spectroscopy, single cell siRNA gene knockouts, and molecular and systems simulations. This position will interact closely with staff from the LLNL biology, engineering, chemistry, physics and computations directorates, as well as with university faculty, including faculty in the Natural Sciences Division at the new UC Merced campus. Position requires a Ph.D. in life sciences, chemistry, engineering, physics, computer science or mathematics and experience in biological experiments or modeling, and experience working in multidisciplinary teams. Demonstrated ability for scientific accomplishment with minimal direct guidance and experience in developing mathematical models is highly desired.

Interested candidates should submit CV, publication list, names of three references and a short description (not to exceed one page) of their research interests and the scientific and technical roles that they envision having in such a team. LLNL offers a challenging environment and competitive salary/benefits package. To be considered, reference source# **AJSC862BS**, and email resume to **pbipostdocsc@llnl.gov**. LLNL is operated by the University of California for the Department of Energy. We are proud to be an equal opportunity employer with a commitment to workforce diversity.



FOR THE FULL TEXT OF THIS POSITION AND OTHERS AT LLNL, VISIT US ON THE WEB AT:

www.llnl.gov/jobs



CHAIR, DEPARTMENT OF PHYSIOLOGY THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

The University of Maryland School of Medicine in Baltimore announces a search for the Chair of the Department of Physiology. The candidate should be a recognized leader with a national reputation in their field, and the expertise and vision to apply the newest molecular research tools, including cell and molecular biology, genetics, genomics, proteomics, and bioinformatics, to enrich a strong existing base of research activities. In addition, outstanding academic leadership and administrative and teaching skills are required. It is highly desirable that the candidate has the ability to foster research and teaching in collaboration with clinical disciplines as well as with basic science departments. The successful candidate should possess a Ph.D. and/or M.D.

Applications should consist of a short letter of intent and a complete updated curriculum vitae. Nominations and applications should be emailed to **ashuldin@medicine.umaryland.edu**, or sent to: **Alan R. Shuldiner, M.D., Chairman, Department of Physiology Search Committee, University of Maryland School of Medicine, 660 West Redwood Street, Room 494, Baltimore, MD 21201.**

The University of Maryland is an Affirmative Action Employer. We encourage applications from women and minorities.

Assistant Professor of Biochemistry and Molecular Biophysics University of Arizona, Tucson

The University Department of Biochemistry and Molecular Biophysics at the University of Arizona invites applications from outstanding candidates for two tenure track faculty positions in the areas of enzymology, signal transduction, membrane biochemistry or metabolic regulation, both at the enzyme and gene level. One of these positions will be in the College of Medicine and the other in the College of Science. The department has appointed three new faculty in the last two years and expects to add several more over the next few years. The University of Arizona and the Department offer excellent facilities and a supportive collegial environment to foster development of exceptional academic careers. The successful candidates will be offered competitive start-up packages for equipment and other resources. The successful candidates will be expected to develop outstanding research programs and to display a commitment to teaching excellence. The Department is responsible for the undergraduate biochemistry degree, participates in the training of medical students and plays a major role in graduate education. The department participates in the Biochemistry and Molecular and Cellular Biology (**<http://bmcb.biology.arizona.edu/>**) and Biological Chemistry (**<http://www.biochem.arizona.edu/bcp/>**) graduate programs and a number of faculty members participate in Interdisciplinary Graduate Programs (**<http://w3.arizona.edu/~gidp/>**). Biochemistry faculty members are also involved in the Institute for Biomedical Science and Biotechnology (**<http://www.biochem.arizona.edu/IBSB/default.html>**). Visit our departmental web site at **<http://www.biochem.arizona.edu/>** or the University of Arizona Human Resources Department web site at **www.hr.arizona.edu**, job number 992661, for more information.

Evaluation of applications will begin on September 9, 2002 and will continue until the position is filled. Applicants must hold a Ph.D. or equivalent degree and have postdoctoral experience. A letter of application, curriculum vitae, bibliography, a description of future research of not more than three-pages, plus three letters of recommendation (sent under separate cover) should be addressed to: **Chair, Biochemistry Faculty Search Committee, c/o Helen Markes, Department of Biochemistry and Molecular Biophysics, BioSciences West Bldg., Rm. 362A, P.O. Box 210088, The University of Arizona, Tucson, AZ 85721-0088.**

The University of Arizona is an EEO/AA Employer M/D/W/V



Two Tenure-Track Positions in Mammalian Developmental Biology

The University of Illinois at Urbana-Champaign invites applications for two full time, tenure-track faculty positions in mammalian developmental biology as part of the campus interdisciplinary initiative in post-genomics. This search is part of a multi-year program that includes the construction of the Post-Genomics Institute, poised to utilize genomic information. Of particular interest are the areas of:

Embryonic and Adult Stem Cell Biology Animal Cloning and Transgenics

Hormonal Regulation of Development and Differentiation

These positions are in the Department of Animal Sciences and the Department of Molecular and Integrative Physiology at the Assistant or Associate Professor level. Applicants should have a doctoral degree, postdoctoral experience, and evidence of outstanding research potential (demonstrated research for Associate Professor). It is expected that the successful candidates will establish an internationally recognized research program, direct both M.S. and Ph.D. students, advise and interact with undergraduate or professional students, contribute to the teaching needs of the departments in appropriate areas, compete effectively for private and public research funds, and participate in the public service missions of the departments. Successful candidates will be provided with excellent laboratory facilities, substantial start-up funds, and a salary commensurate with experience. Information about the position and each department can be found at **<http://www.ansci.uiuc.edu/jobs/mamdev.html>**. Applicants should submit their application to: **Dr. Neal Merchen, Acting Head, Department of Animal Sciences, University of Illinois at Urbana-Champaign, 328 Animal Sciences Lab, 1207 West Gregory Drive, Urbana, IL 61801; nmerchen@staff.uiuc.edu. Questions can be directed to Dr. David Miller djmille@uiuc.edu. An application must include curriculum vitae with a complete list of publications, a concise summary of research interests and future plans, and three letters of recommendation. To ensure full consideration, applications should be received by **October 15, 2002.****

The University of Illinois at Urbana-Champaign is an Affirmative Action, Equal Opportunity Employer.



**Chair - Oral Biology
The Ohio State University
College of Dentistry**

The College of Dentistry invites applications for the Chair of Oral Biology. Oral Biology is well-funded with a diverse and dynamic research portfolio including neurobiology of taste, neuroendocrine immunology, wound healing, molecular microbiology, and muscle physiology. The Chair is expected to provide skillful leadership and demonstrated experience in administration to foster and strengthen faculty development, and to be committed to research and education in oral and craniofacial biology. The Chair should maintain an active research program and lead the faculty in the development of significant externally funded research.

Qualifications for this full-time, tenure track position include an earned PhD degree or equivalent, demonstrated excellence in academic scholarship and an established record in research and education. A dual degree background (DDS/PhD) or equivalent is highly desirable for bridging the domains between the clinical and basic sciences. The academic rank accompanying the position is commensurate with the education and experience of the successful candidate.

Oral Biology currently includes 9 full-time faculty positions. The faculty occupies contemporary research laboratories in the College of Dentistry. Additional research space committed to Oral Biology (3532 sq. ft.) has been converted into a state-of-the-art laboratory and office facility.

The Ohio State University has the most comprehensive health sciences center in America. Additionally it has the largest student body on one campus in the USA. The College of Dentistry is strategically located between the Health Sciences and Medical Complex and the Colleges of Arts, Science and Engineering.

Salary will be commensurate with the candidate's qualifications and experience.

It is the policy of the Ohio State University to limit access to communications and letters of reference to those directly involved in the selection process. However, the status of this policy is unclear under the Ohio Open Records Act. Those seeking confidentiality should indicate this fact in all communications. The University will make every reasonable effort to honor these requests within the limits of Ohio law.

Review of applications will begin immediately and continue until a Chair is named. Inquiries, nominations, and curriculum vitae should be directed to:

Dr. Katherine Vig (vig.2@osu.edu)
305 West 12th Avenue
P. O. Box 182357
Columbus, OH 43218-2357

The Ohio State University is an Equal Opportunity/Affirmative Action employer. Qualified women, minorities, Vietnam-era veterans and individuals with disabilities are encouraged to apply.



MAYO CLINIC

**POSTDOCTORAL FELLOW
Gastroenterology
Rochester, Minnesota, U.S.A**

A postdoctoral position is available at the Mayo Medical School in the laboratory of **Frank Sinicrope, M.D.** within the Department of Gastroenterology for a highly qualified individual with an interest in cellular and molecular analyses of regulatory aspects of apoptosis induction by chemopreventive and chemotherapeutic agents utilizing cultured cells and tissue specimens. The laboratory is especially interested in the genetic regulation of cyclooxygenase enzymes during colorectal tumorigenesis and their pharmacologic inhibition. The laboratory is equipped with state-of-the-art equipment and is supported by institutional core facilities. Experience in cellular and molecular biology including gene expression and regulation analysis is preferred. Applicants should have a Ph.D. or M.D. degree.

Salary will be determined by the successful candidate's experience. There is an attractive benefit package. Mayo Clinic is a not-for-profit organization. Mayo integrates research with clinical practice and education in a multi-campus environment. For further information please visit <http://www.mayo.edu/research/>.

Applications, including curriculum vitae and bibliography, summary of past accomplishments, and the names of three references, should be sent to:

Dr. Frank Sinicrope
Consultant Investigator, Gastroenterology
Mayo E-19 A
Mayo Clinic
200 First Street SW
Rochester, MN 55905
507-266-8660
sinicrope.frank@mayo.edu

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

Positions Available at the University of Vermont

In the Area of Cellular/Molecular Biology of Excitable Cells

Applications are invited for a tenure-track position in the Department of Biology in the broad area of Cellular/Molecular Biology of Excitable Cells, to augment the research in the department in this area. Successful candidates will have experience with molecular or cellular techniques, research interests in excitable cells, and teaching interests in physiology and development. Candidates taking a multi-disciplinary approach and who exploit modern technologies to investigate molecular mechanisms of biological function will be strongly considered.

In the Area of Molecular Systematics/Evolution

Applications are invited for a tenure-track position that is anticipated in the Department of Biology in the broad area of Molecular Systematics/Evolution, to augment the research in the department in this area. Successful candidates will use modern molecular techniques to investigate the phylogeny, systematics, and evolution of invertebrate taxa, with teaching interests in evolution, phylogeny, and invertebrate zoology.

All applicants are expected to (1) hold a Ph.D. degree and have two or more years of postdoctoral experience; (2) develop a competitively funded program; and (3) teach undergraduate and graduate level courses. Applicants should forward a current curriculum vitae and brief descriptions of their research AND teaching interests, and should solicit three letters of reference to be sent to:

Dr. Judith Van Houten
Chair, Department of Biology
University of Vermont
120A Marsh Life Science Building
Burlington, VT 05405-0086

Review of applicants will begin on **November 1, 2002**.

*We especially encourage women, disabled and minority candidates to apply.
The University of Vermont is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR Neuroscience

Dallas: The Department of Psychiatry at The University of Texas Southwestern Medical Center at Dallas is seeking outstanding Neuroscientists with research interests in neurobiological basis of mental illness including molecular neurobiology, cellular and systems physiology, and genetics. The successful candidate will have an M.D. and/or Ph.D. degree with postdoctoral research experience; outstanding potential for acquiring external funding to maintain an active, independent research program; and ability to work effectively within a highly multidisciplinary and collaborative research group. Outstanding research facilities and start-up packages are available. Please submit curriculum vitae and cover letter (with names of three references) to:

Dr. Eric J. Nestler
Chairman, Department of Psychiatry
The University of Texas Southwestern
Medical Center
5323 Harry Hines Boulevard
Dallas, TX 75390-9070
E-mail: eric.nestler@utsouthwestern.edu

The University of Texas Southwestern Medical Center is an Equal Opportunity Employer.

ECOLOGIST: ASSISTANT or ASSOCIATE PROFESSOR, tenure track, in biology beginning September 2003 (see website: http://www.brynmawr.edu/academic/fields_study/biology.shtml). Among teaching responsibilities are courses in ecology (including a field course) and involvement in team-taught introductory biology. Maintenance of an active research program and participation, with the potential for leadership, in an interdisciplinary program in Environmental Studies are expected. A Doctorate and at least one year of postdoctoral research experience are required. Send curriculum vitae; statement of research and teaching interests; three letters of recommendation; and research budget by November 1, 2002, to: **Peter D. Brodfuehrer, Chair, Department of Biology, Bryn Mawr College, 101 North Merion Avenue, Bryn Mawr, PA 19010-2899**. Bryn Mawr is a liberal arts college for women with coeducational graduate programs in sciences, some humanities, and social work. The College supports faculty excellence in both teaching and research and provides a rigorous education in the context of a diverse and pluralistic scholarly community. Located 11 miles west of Philadelphia, Pennsylvania, Bryn Mawr participates in consortial programs with the University of Pennsylvania and Haverford and Swarthmore Colleges. *Bryn Mawr College is an Equal Opportunity/Affirmative Action Employer. Minority candidates and women are especially encouraged to apply.*

ASSISTANT OR ASSOCIATE PROFESSORS Pharmaceutics College of Pharmacy University of Oklahoma

The University of Oklahoma College of Pharmacy invites applicants for two tenure-track positions at the level of Assistant or Associate Professor in the Department of Pharmaceutical Sciences. Applicants must have a Ph.D. in pharmaceutics, pharmacokinetics, or a related discipline. The successful candidates should be capable of developing an externally funded, independent research program and teaching in our professional and graduate programs. Preference will be given to applicants who have a degree in pharmacy and/or postdoctoral experience. The positions will be available in the fall semester of 2002.

Interested individuals should submit curriculum vitae and the names of three references to: **Lester A. Reinke, College of Pharmacy, University of Oklahoma Health Sciences Center, P. O. Box 26901, Oklahoma City, OK 73190**. For more information about our College and this position, please visit our website: <http://www.oupharmacy.com>. *The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR, PHYSICS New Jersey Institute of Technology

New Jersey Institute of Technology invites applications for a tenure-track Assistant Professor to interact with a strong community of Researchers at NJIT interested in optics (photonics, optical wave guides/devices/integrated optics, bioelectronics, optical biophysics, laser physics, or imaging); MEMS; molecular/bioelectronics; or electronic materials. The successful candidate will have a Ph.D. in physics or related field and relevant postdoctoral experience. He/she will be expected to develop an independent, externally funded research program and participate in both graduate and undergraduate teaching in the Department. The University reserves the right to substitute equivalent education and/or experience at its discretion.

NJIT offers abundant opportunities for academic-industrial partnerships. The city of Newark, located within 20 minutes of New York City, boasts a world-class Performing Arts Center, a fine museum, three research universities, and many fine ethnic restaurants.

Applications will be reviewed starting November 1, 2002, and the search will continue until the position is filled. Send curriculum vitae, statement of research interest, and three letters of recommendation to: **New Jersey Institute of Technology, Attention: Personnel Box P-AP, University Heights, Newark, NJ 07102-1982**.

NJIT is an Equal Opportunity/Affirmative Action/Equal Access Employer.

ASSISTANT PROFESSOR

University of South Carolina School of Medicine

Applications are invited for a tenure-track faculty position in the Department of Pharmacology, Physiology, and Neuroscience at the University of South Carolina School of Medicine. Applicants must have a Ph.D. or M.D. and postdoctoral experience in neuroscience. Successful candidates will develop an independent but interactive research program and participate in the teaching of medical and graduate students. Individuals who use molecular and cellular approaches to study physiological processes and complex behaviors are particularly encouraged to apply.

Applications should consist of a single Adobe Acrobat, Microsoft Word, or Rich Text file containing (1) a cover letter summarizing relevant experience; (2) curriculum vitae including publication list; (3) a statement of research plans and professional goals; and (4) contact information for at least three references. Applications should be sent to: **Dr. Steven P. Wilson, Chair of the Department; e-mail: sw@sc.edu**. Review of applications will begin September 30, 2002. For more information about the School of Medicine and our department, please visit our website: <http://www.med.sc.edu>. *USC is an Affirmative Action/Equal Opportunity Employer.*

NEUROBIOLOGIST ASSISTANT PROFESSOR University of Denver

The Department of Biological Sciences, University of Denver, invites applications for a tenure-track position at the Assistant Professor level to begin September 1, 2003. Candidates from any field within neurobiology are sought. The successful candidate will have a Ph.D. and postdoctoral experience in appropriate fields, will develop an extramurally funded research program, will supervise M.S. and Ph.D. students, and will teach undergraduate and graduate courses in areas of specialty. Submit curriculum vitae, two recent publications, three letters of recommendation, and statements of (1) teaching philosophy and (2) research interests to: **Dr. Joseph Angelson, Chair, Neurobiologist Search Committee, Department of Biological Sciences, University of Denver, Denver, CO 80208**. Information about the Department of Biological Sciences can be found at website: <http://www.du.edu/biology/>. Applications should be received by October 15, 2002. *The University of Denver is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS AVAILABLE

**The Carolina Cardiovascular Biology Center
Department of Cell and Molecular Physiology
University of North Carolina at Chapel Hill**

The Carolina Cardiovascular Biology Center and the Department of Cell and Molecular Physiology, University of North Carolina at Chapel Hill, announce the opening of a search for two new Investigators to join this newly created research initiative. The Search Committee will consider scientists at the ASSISTANT or ASSOCIATE PROFESSOR level. Rank and salary will be commensurate with experience. Preferred applicants will have an active research program in the general area of vascular pathobiology. The Search Committee is especially interested in Investigators applying genetic approaches to understand cardiovascular physiology; the Committee is interested in new model organism approaches. Newly recruited faculty will be provided with a generous start-up package and assistance with career development. Strong applicants will demonstrate an ability to garner extramural funding; active research support is preferred but not required.

Interested applicants should send a letter of interest and updated curriculum vitae to:

Cam Patterson, M.D.
Director, Carolina Cardiovascular Biology Center
University of North Carolina at Chapel Hill
5109 Neurosciences Research Building
CB Number 7126

Chapel Hill, NC 27599-7126
Telephone: 919-843-6477

E-mail: ccvsearch@medexch.med.unc.edu

UNC-CH is an Equal Opportunity/Americans With Disabilities Act Employer. Women and minorities are encouraged to apply.

The Department of Radiation Oncology, Massachusetts General Hospital/Harvard Medical School, invites applications for a position at the level of ASSISTANT or ASSOCIATE PROFESSOR in molecular/cellular radiation biology. Current interests in this division of the Department are DNA repair and apoptosis; the applicant's interests would preferably complement these and involve DNA damage induction, sensing and repair, apoptosis, cell cycle checkpoints, signal transduction, or genetic determinants of the response to DNA damage. Minimal qualifications include a Ph.D. and/or M.D. Experience in molecular, cellular, or radiation biology is an advantage. Postdoctoral experience in a complementary area is welcome. The successful candidate will have a record of independent, original research and will be expected to have funding from extramural sources. Applicants should send curriculum vitae, statement of research interests, and names and contact information on three references to: **Dr. Kathryn D. Held, Department of Radiation Oncology, Cox 302, Massachusetts General Hospital, Fruit Street, Boston, MA 02114**. E-mail: kheld@partners.org. *Equal Opportunity/Affirmative Action Employer. Women, minorities, disabled, and veterans are encouraged to apply.*

As part of an aggressive expansion program, the School of Chemistry and Biochemistry of the Georgia Institute of Technology seeks to fill up to five new **TENURE-TRACK FACULTY POSITIONS**. Exceptional candidates in all areas are encouraged to apply. Outstanding candidates for advanced rank positions are encouraged. Interdisciplinary candidates will be considered for joint appointments with other departments. Further information is available on our website: <http://www.chemistry.gatech.edu>. Candidates at the entry level should send an application letter, curriculum vitae, a summary of research plans, and should request three letters of reference. Advanced candidates should send curriculum vitae and the names of three references. All materials and requests for information should be directed to: **Chair, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332-0400**. Applications will be considered beginning October 15, 2002, but applications past that date will be considered until the positions are filled. *Georgia Tech is an Equal Education/Employment Opportunity Institution.*



COLUMBIA UNIVERSITY Department of Biological Sciences

Columbia University invites applications for an open-rank search in the Department of Biological Sciences. Preference will be given to applicants whose research addresses important problems in modern biology and involves cell, developmental, or structural biology. An outstanding research record is expected. Address any inquiries by e-mail to the Faculty Search Committee (e-mail address jc837@columbia.edu).

Send CV, statement of research goals, and three letters of reference by November 15, 2002, to:

**Chair, Faculty Search Committee
Department of Biological Sciences
Columbia University
600 Fairchild
MC 2402
New York, NY 10027**

Columbia University is an equal opportunity/affirmative action employer and encourages applications from members of underrepresented groups.



UFZ-Centre for Environmental Research Leipzig-Halle - A Member of the Helmholtz Association

The UFZ-Centre for Environmental Research Leipzig-Halle is a legally independent research institution within the "Hermann von Helmholtz Association of National Research Centres" (HGF), which is jointly funded by the Federal Republic of Germany, the Free State of Saxony and the Land of Saxony-Anhalt within the framework of programme-oriented funding. For details see <http://www.ufz.de>

The position of

Scientific Director

at the Centre for Environmental Research Leipzig-Halle is due to become vacant with effect from **1 January 2004**.

As the German centre of competence for environmental research, the UFZ studies the interplay between man and the environment, particularly in used and impacted areas. Scientific findings are closely linked with findings in the fields of environmental medicine, social sciences, ecological economics and environmental law. The UFZ sets out to develop concepts and procedures for safeguarding the natural basis for life for future generations.

The UFZ has close ties with other research centres in the HGF through its participation in several programmes in the HGF's areas of research "Earth and the Environment" and "Health". It also cooperates intensively with German universities and institutions of higher education, particularly in Saxony and Saxony-Anhalt, as well as with institutions abroad.

The UFZ has assumed a particularly active role in the development of an European environmental research network. The UFZ's annual budget currently stands at just over 50 million Euro. These funds must be raised within the framework of programme-oriented funding in a competition for the resources which are available for distribution. Approximately 650 members of staff are employed at the centre's three sites in Leipzig, Halle and Magdeburg.

The Scientific Director is spokesperson for the management. He or she is responsible for conducting the affairs of the centre together with the Administrative Director.

The work of the UFZ, with its numerous national and international cooperation projects, demands a Scientific Director who is familiar with managerial tasks and has national and international experience in public or private-sector inter-disciplinary science and research management.

The successful candidate will be an outstanding scientist with proven leadership qualities. He or she should be able to run the research centre in a way which furthers integration, and to represent the centre externally.

The appointment is for an initial period of up to five years. Reappointment is possible. Salary is within the framework of reimbursement for exceptional professorships.

The research institutions of the Helmholtz Association have undertaken to increase the proportion of women in leading positions. Applications from qualified women will therefore be particularly welcomed. Preference will be given to equally qualified disabled applicants.

Interested candidates are asked to submit their applications including relevant supporting documents, which will, of course, be treated in confidence, to the

Chairman of the Supervisory Board of the UFZ-Umweltforschungszentrum Leipzig-Halle GmbH
Mr MinDirg. Dr. Christian D. Uhlhorn, - Confidential -
Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung)
Heinemannstraße 2, 53175 Bonn

by **30 September 2002**.

UFZ - UMWELTFORSCHUNGSZENTRUM LEIPZIG-HALLE GMBH



STAFF SCIENTIST GENETICS OF TYPE 2 DIABETES National Human Genome Research Institute National Institutes of Health Department of Health & Human Services

The National Human Genome Research Institute is seeking an experienced individual for an exciting research position on the genetics of type 2 diabetes (T2DM). The laboratory, directed by **Francis Collins, M.D., Ph.D.**, is systematically searching the genome for genes that confer susceptibility to T2DM using both microsatellite genome scanning of families for linkage, and high throughput SNP analysis of cases and controls for association. Detailed phenotypic information of both affected status and associated traits has been collected on more than 5000 individuals from Finnish families with T2DM, as well as unaffected controls. Several promising linkage and association signals are now being investigated. The research lab is equipped with an impressive array of technologies to carry out high throughput genotyping and candidate gene analysis. The successful applicant for this position must hold an M.D., Ph.D., M.D./Ph.D. or equivalent degree, and will be responsible for day to day management and oversight of a group of about 10 researchers, including full time students, technicians, programmers and database managers, and postdoctoral fellows. Applicants should have thorough familiarity with the laboratory challenges associated with linkage and association studies on complex disease, and should have excellent communication and managerial skills. While this is not a tenure track position, it involves appointment as a Staff Scientist at NIH, which carries with it substantial long term job security and excellent salary and benefits. The scientific atmosphere of the NIH intramural program is extremely stimulating, with many opportunities for interactions with scientific experts in almost every possible field of biomedical research. Please send a resume and names of three references to **Francis Collins** at fc23a@nih.gov.

The NIH is an Equal Opportunity Employer and applications by women and minorities are strongly encouraged.

SCIENCE WRITER

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), Department of Health and Human Services (DHHS), is seeking applications from individuals who are currently in post-doctoral positions but who wish to leave laboratory research for a career as a science writer. Particularly encouraged to apply are individuals with post-doctoral experience in molecular biology, coupled with demonstrated writing and other communication skills. Incumbent will develop a wide range of documents that analyze and present the scientific accomplishments and plans of the NIDDK to the Congress, voluntary health organizations, and other lay audiences and must thus be able to convey in global, understandable terms the contributions of biomedical research to human health. Total salary is competitive and will be commensurate with the experience of the selectee.

Please submit current curriculum vitae to the attention of:

Ms. Deirdre Davis
Office of Human Resource Management
National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
6707 Democracy Blvd., Room 785D
Bethesda, Maryland 20892-5451

Applications must be postmarked by August 16, and received by close of business August 21.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

POSITIONS OPEN

DEAN, SCHOOL OF MARINE SCIENCE DIRECTOR, VIRGINIA INSTITUTE OF MARINE SCIENCE

College of William and Mary

Nominations and applications are invited for the joint position of Dean, School of Marine Science (SMS), and Director, Virginia Institute of Marine Science (VIMS). SMS/VIMS is dedicated to development of new knowledge through research, to graduate education, and to provision of technical advice relating to marine issues of Virginia.

At present, the Dean and Director administers a scientific and support staff of approximately 375, of whom 61 are academic faculty; an annual operating state general fund budget of \$18 million; a research vessel fleet; and a large existing physical plant spanning two campuses, with the anticipated addition of a Marine Science Research Complex of some 114,000 square feet that is currently in the planning phase. Expenditures for extramural research awards in fiscal year 2000/2001 were \$13 million. The faculty is organized into five departments: Biological Sciences, Environmental and Aquatic Animal Health, Fisheries Science, Physical Sciences, and Coastal and Ocean Policy. Regional, national, and international research and advisory programs are conducted across the broad subdisciplines of marine science with an emphasis in the coastal ocean. The academic program offers M.S. and Ph.D. degrees in marine science (with a student body of about 100) and an outstanding level of postgraduate achievement in private, government, and academic positions. The Institute is mandated as Virginia's official scientific advisor to state agencies on marine-related issues.

The collective resources, along with its success during the past decade and the recent federal emphasis on coastal issues, create the potential for SMS/VIMS to be the nation's premier coastal marine science program. The successful candidate will be expected to have the vision and necessary skills to realize this goal. In particular, expectations for the position include (1) leadership qualities that will facilitate the continued success of academic, research, and advisory programs; (2) the ability to communicate effectively with federal, state, and private entities in order to achieve fiscal and policy goals; and (3) the desire to continue the expansion of collaboration with other schools and departments at the College. Nominations; confidential inquiries; and (in the case of applicants) a letter of application, detailed résumé, and names and addresses of at least three references should be directed to:

Dr. Steven A. Kuehl
School of Marine Science
Virginia Institute of Marine Science
College of William and Mary
Gloucester Point, VA 23062 U.S.A.
E-mail: kuehl@vims.edu

Review will begin October 15, 2002, and we will continue to accept materials until the position is filled, with an anticipated starting date of 1 July 2003.

The College is an Equal Employment Opportunity/Affirmative Action Employer.

PLANT BIOLOGIST: Applications are invited for a 10-month, tenure-track **ASSISTANT PROFESSOR** position to begin August 2003. The successful candidate will be expected to develop an active research program involving Master's-level and undergraduate students. Research area is open. Teaching responsibilities will include plant physiology/plant biology at the introductory level and upper-division/graduate coursework in the candidate's area of expertise. Ph.D. is required; postdoctoral experience a plus. Applicants should submit a letter of application; their curriculum vitae; reprints; statements of research interests and teaching philosophy; and have three letters of recommendation sent to: **Dr. George S. Mourad, Chair, Plant Biology Search Committee, Department of Biology, Indiana University/Purdue University Fort Wayne, Fort Wayne, IN 46805-1499** by October 25, 2002. E-mail: mourad@ipfw.edu; website: <http://www.ipfw.edu/bio/>. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER *Making Cancer History*

FACULTY POSITION

The University of Texas M. D. Anderson Cancer Center seeks highly qualified applicants for tenure-track appointment as **ASSISTANT PROFESSOR/ASSOCIATE PROFESSOR** in the Department of Neuro-Oncology, with joint appointment in Molecular Genetics or Molecular Biology and Biochemistry Departments. Generous start-up funds and excellent laboratory space are available. Candidates must have Ph.D. and/or M.D. and postdoctoral experience. Although we are generally interested in the areas of developmental neurobiology and signal transduction pathways, suitable candidates in all other fields will be considered. Current research in the Department includes signal transduction, angiogenesis, developmental biology, transcription biology, and synthetic chemistry.

Applicants should send their curriculum vitae along with three letters of reference to: **W. K. Alfred Yung, M.D., Department of Neuro-Oncology, UT M. D. Anderson Cancer Center, Unit 431, 1515 Holcombe Boulevard, Houston, TX 77030.** Equal Employment Opportunity Employer/smoke-free environment. Women and minority candidates are encouraged to apply.

BIOORGANIC CHEMISTRY Dartmouth College

Applications are invited for a faculty position at the **ASSISTANT or ASSOCIATE PROFESSOR** level starting July 2003. The Chemistry Department seeks an individual who will establish a nationally recognized research program in organic chemistry at Dartmouth and who will excel at teaching in our undergraduate and Ph.D. curriculum. The Department has under way a major initiative in the area of structural biology, and preference will be given to individuals who use organic synthesis to address problems of biological significance. Candidates will be expected to be able to teach introductory and advanced courses in organic chemistry as well as graduate courses in their area of research. Applicants should submit curriculum vitae, a description of their research plans, and a brief statement about their teaching interests. Applicants should also arrange to have three letters of recommendation sent on their behalf. All inquiries and applications will be treated confidentially. Application materials should be sent to: **Chair, Organic Chemist Search Committee, Department of Chemistry, 6128 Burke Laboratory, Dartmouth College, Hanover, NH 03755-3564.** The Committee will begin to consider completed applications on October 15, 2002. With an even distribution of male and female students and over a quarter of the undergraduate student population members of minority groups, Dartmouth is committed to diversity and encourages applications from women and minorities. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

TENURED PROFESSORSHIP IN RESEARCH University Of California, Davis

The Department of Dermatology at the University of California, Davis, is seeking a faculty at the **ASSOCIATE or FULL PROFESSOR** level. The primary responsibility of this faculty will be to conduct basic research. Candidate should be an experienced Ph.D., M.D./Ph.D., or M.D. Scientist with expertise in basic research related to cutaneous biology, skin disease, immunology, pharmacology, or cancer who is currently receiving federal funding and is expected to maintain a vigorous research program. If interested, please respond by sending curriculum vitae and letter of inquiry with a list of three references to: **Fu-Tong Liu, M.D., Ph.D., Professor and Chair, Department of Dermatology, University of California, Davis, 4860 Y Street, Suite 3400, Sacramento, CA 95817.** This position will remain open until filled but not later than July 31, 2003. The University of California, Davis, is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR TO FULL PROFESSOR EPIDEMIOLOGIST

The Department of Epidemiology and Preventive Medicine, School of Medicine, University of Maryland, Baltimore, invites applications for a tenure-track position. Preference will be given to individuals with a Ph.D. in epidemiology or an established record of original research in the field of epidemiology. The successful candidate will be expected to develop and maintain an independent research program and to participate in the Department's teaching programs for graduate and medical students. Rank and salary will be commensurate with qualifications. Applications will be accepted until the position is filled.

The Department, which comprises over 50 full-time faculty, has strong, multidisciplinary research programs in a wide range of public health areas including women's health, gerontology, international health, biostatistics/informatics, toxicology and environmental epidemiology, molecular epidemiology, and hospital epidemiology. The Department has both M.S. and Ph.D. degree programs.

Interested candidates should submit curriculum vitae and a letter highlighting their qualifications and interests to: **Jodi Anne Flaws, Ph.D., c/o Diane Lindt, Department of Epidemiology and Preventive Medicine, University of Maryland, Baltimore, 660 West Redwood Street, Room 109, Baltimore, MD 21201.** Telephone: 410-706-3185; FAX: 410-706-3484; e-mail: dlindt@epi.umaryland.edu.

The University of Maryland, Baltimore, is an Affirmative Action/Equal Employment Opportunity/Americans With Disabilities Act Employer. Minorities and women are encouraged to apply.

ASSISTANT OR ASSOCIATE PROFESSOR Harvard Medical School MGH-NMR Center, Department of Radiology Massachusetts General Hospital

We are seeking one or two full-time faculty members at the Assistant or Associate Professor level. Candidates will perform research and development using the MEG (magnetoencephalogram). They should possess a Ph.D. in physics (applied) or biophysics or bioengineering. A solid understanding of magnetism is required as well as experience in this area. The MEG work will include recording experimental data from patients and using and modifying the extensive software that processes the data. Hence experience in computer programming is also necessary.

Applicants should send a letter of interest and curriculum vitae to: **Bruce R. Rosen, M.D., Ph.D., Director, MGH-NMR Center, Building 149, 13th Street, Charlestown, MA 02129.** E-mail: bruce@nmr.mgh.harvard.edu. Massachusetts General Hospital is an Equal Opportunity Employer and women and minorities are encouraged to apply.

CHAIR, DEPARTMENT OF PEDIATRICS The University of Texas Southwestern Medical Center at Dallas

The University of Texas Southwestern Medical Center at Dallas is initiating a search for a new Chair of the Department of Pediatrics. UT Southwestern is a premier academic institution that counts among its faculty four Nobel Laureates, 13 members of the National Academy of Sciences, and 12 members of The Institute of Medicine.

Candidates should have an established national record of achievement in academic pediatrics and be prepared to lead the Department in UT Southwestern's multidepartmental quest for excellence.

Curriculum vitae and a list of three references should be sent to: **Eric J. Nestler, M.D., Ph.D., Department of Psychiatry, UT Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75390-9070.**

The University of Texas Southwestern Medical Center is an Equal Opportunity Employer.



The Department of Zoology at the University of Hawaii invites animal physiologists whose research interests integrate with existing departmental strengths in ecology, evolution, and developmental biology to apply for a tenure-track ASSISTANT PROFESSOR position. Teaching responsibilities will include an advanced undergraduate course in animal physiology and a graduate course in the individual's specialty. Applicants must have a Ph.D. in a relevant area of the biological sciences, evidence of significant research accomplishments, and a commitment to teaching.

To apply send letter of application, curriculum vitae, statement of research accomplishments and goals, and the names, addresses, and email contacts of three references to: **Search Committee, Department of Zoology, 2538 McCarthy Mall; University of Hawaii, Honolulu, HI 96822.** Inquiries should be directed to zoology@hawaii.edu. Closing date: To receive full consideration applications must be received by **October 1, 2002**. However, review of applications will continue until position is filled.

EEO/AA Employer.



**Department of Biological Sciences
at
THE UNIVERSITY OF IOWA
Faculty positions
in**

CELL BIOLOGY

One tenure-track position at the Assistant or Associate Professor level is open for an individual interested in the cell and molecular biology of cell and/or growth cone motility. Areas of particular interest include: actin dynamics, the Arp2/3 complex, Rac/Rho/cdc42, SCAR/WASP, membrane receptor cytoskeletal interactions, signaling, and high resolution imaging; however, applicants in other related areas will also be carefully considered. Candidates will have access to the Keck Dynamic Image Analysis Facility (<http://keck.biology.uiowa.edu>) housed in the Department of Biological Sciences and will join an established Program in Cell Motility, continuously funded by the NIH for 19 years.

MOLECULAR EVOLUTION

The Center for Comparative Genomics, in conjunction with the Department of Biological Sciences, invites applications for one faculty position in the area of molecular evolution at the Assistant or Associate Professor level. Successful candidates are expected to have an internationally visible research program that uses molecular or theoretical approaches to study significant problems in evolution. These problems include, but are not limited to, genome evolution, comparative genomics, population genetics, evolution of regulatory circuits, and evolution of host-pathogen interactions in animals and plants. The Department is committed to expanding an internationally recognized program in comparative genomics and successful candidates will participate in filling additional positions in subsequent years. More about the Center for Comparative Genomics may be found at <http://www.biology.uiowa.edu/ccg>.

Candidates for both positions should have a recognized record of accomplishment as reflected in publications in leading journals. Successful candidates will be expected to establish and maintain an extramurally funded research program. Recently renovated space and competitive start-up packages will be made available. More information on the Department of Biological Sciences is available at www.biology.uiowa.edu. Applicants should send a curriculum vitae, statement of research objectives, selected reprints, a description of teaching interests, and the names of three references to the appropriate search committee: **David Soll, Chair, Cell Biology Search Committee or Bill Ballard, Chair, Evolution Search Committee, The University of Iowa, Department of Biological Sciences, 138 Biology Building, Iowa City, Iowa 52242-1324.**

Applications will be considered as they are received. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.



**St. Jude Children's
Research Hospital**
ALSAAC • Danny Thomas, Founder

**POSTDOCTORAL POSITIONS
IN MOLECULAR AND
DEVELOPMENTAL BIOLOGY
(REQ #1839)**

NIH-funded postdoctoral positions are available to work on different aspects of early mammalian development, particularly in the mechanisms involved in forebrain and visual system development (*Six3*), and lymphatic vasculature formation (*Prox1*). Using generated knock-out, conditional knock-out, transgenic mice and microarray technology, we aim to unravel the regulatory pathways involved in these processes. Candidates who recently obtained a Ph.D. or MD degree with a strong background in developmental biology are encouraged to apply. Interested individuals should send their curriculum vitae, a brief description of their research interests, and the names of three references, indicating REQ #1839, to:

**Guillermo Oliver, Ph.D.
Associate Member
Department of Genetics
St. Jude Children's Research Hospital
332 N. Lauderdale
Memphis, TN 38105
USA**

www.stjude.org/departments/oliver.htm

St. Jude is an equal opportunity/affirmative action employer.

www.stjude.org



MAYO CLINIC

**POSTDOCTORAL FELLOW
Gastroenterology and Hepatology
Rochester, Minnesota, U.S.A**

A postdoctoral position is available immediately in the laboratory of **Nicholas F. LaRusso** at the Mayo Medical School for a highly qualified, experienced individual with an interest in cellular and molecular approaches to study the pathogenesis of infectious biliary diseases. The successful applicant will have an M.D. or Ph.D. degree, with experience in cellular and molecular biology. The research approaches utilize cells in culture, transgenic/knockout mice, sophisticated microscopy, and biochemical and molecular approaches to examine molecular aspects of microbial infection of biliary epithelial cells, especially aspects of organism attachment, entry and effects on host cell functions. The laboratory is equipped with state-of-the-art equipment, with the support of sophisticated institutional core facilities. Experience with basic research in microbiology/parasitology preferred.

Salary will be determined by the successful candidate's experience. There is an attractive benefit package. Mayo Clinic is a not-for-profit organization. Mayo integrates research with clinical practice and education in a multi-campus environment. For further information please visit <http://www.mayo.edu/research/>.

Applications, including curriculum vitae and bibliography, summary of past accomplishments, and the names of three references, should be sent to:

**Dr. Nicholas F. LaRusso, MD
Chairman of Medicine
Gastroenterology & Hepatology
1727 Guggenheim
200 First Street SW
Rochester, MN 55905
507-284-1006 / 507-284-0762
hintz.debbie@mayo.edu**

*Mayo Foundation is an Affirmative Action and
Equal Opportunity Employer and Educator.*

POSITIONS OPEN

ASSISTANT PROFESSOR POSITIONS CENTER FOR MEMBRANE BIOLOGY University of Texas Medical School at Houston

Applications are invited for four tenure-track Assistant Professor positions in the newly established Center for Membrane Biology at the University of Texas Medical School at Houston, with appointment in the Department of Biochemistry and Molecular Biology. The new faculty members will join an interactive group of interdepartmental faculty with established programs focused on membrane structure/function and will develop independent research programs on current aspects of membrane biology. Successful applicants will receive a competitive salary and start-up package of research funds and newly remodeled laboratory and office space. Research areas of special interest include membrane protein expression; insertion and folding; lipid function; membrane protein crystallography; and structure/function of G protein-coupled receptors, ligand-activated channels, multi-drug efflux systems; and other receptors, channels, and transport proteins. Information on the Center for Membrane Biology can be found at the following website: <http://www.uth.tmc.edu/cmb/>. Complete curriculum vitae, statement of research plans, representative publications, and names of three references should be sent by November 1, 2002, to: **Professor John Spudich, Director and Chair of Search Committee, Center for Membrane Biology, Attention: Joannette Payne, Department of Biochemistry and Molecular Biology, University of Texas Medical School at Houston, 6431 Fannin Street, MSB 6.130, Houston, TX 77030.**

The University of Texas Health Science Center is an Affirmative Action/Equal Opportunity Employer committed to excellence through diversity.

SCIENTIFIC CURATOR

The Zebrafish model organism database, ZFIN, seeks Scientific Curators to join our dynamic, interactive team of Biologists and Computer Scientists at the University of Oregon in Eugene, Oregon.

Responsibilities include the curation and integration of the emerging zebrafish whole genome sequence with genetic and biological data available in ZFIN; the acquisition, evaluation, and analysis of information about zebrafish gene structures, expression patterns, and mutant phenotypes; and the participation in database and interface design by providing biological perspectives to new database content and display concepts. Applicants should have a Ph.D. in molecular biology or genetics with experience in molecular genetics and, preferably, zebrafish biology. For more information on ZFIN, see website: <http://zfin.org>. Send curriculum vitae and references to: **Ellen McCumsey, Institute of Neuroscience, University of Oregon, Eugene, OR 97403-1254. FAX: 541-346-4548.**

Affirmative Action/Equal Opportunity/Americans With Disabilities Act Institution committed to cultural diversity.

RESEARCH ASSOCIATE Molecular Biology and Plant Genetics

Ceres is utilizing high-throughput genomics and molecular genetic approaches for developing new tools and strategies for crop improvement and plant breeding. We are seeking highly qualified and exceptionally motivated candidates to conduct research in a discovery-oriented team setting.

We are seeking skilled and exceptionally motivated candidates to join a team using transcription and chromatin-level control strategies for crop improvement. Candidates must possess M.S./B.S./B.A. degree in molecular biology, genetics, cell or developmental biology and several years of experience in chimeric gene construction, site-directed mutagenesis, gene function analysis, and/or promoter analysis using plant, fungal, or animal systems.

Ceres is located in state-of-the-art facilities overlooking the Malibu, California, coast. We offer competitive salaries and excellent benefits including equity participation and 401(K).

Please e-mail résumé and list of references to e-mail: ssnitman@ceres-inc.com. Please refer to Job Code RA-SC-0802.

POSITIONS OPEN

COMPUTATIONAL AND SYSTEMS BIOLOGY EDUCATION Massachusetts Institute of Technology (MIT)

Seeking an innovative, energetic Ph.D.-level Scientist to serve as Coordinator of Curriculum Development for MIT's new initiative in computational and systems biology. This two-year, full-time position will involve working with faculty Instructors to formulate, implement, and teach concepts in computational biology, bioinformatics, protein structure modeling, biological networks, data processing, databases, and related subjects. Candidates must have a strong background in biology; experience in several of the areas mentioned above; and excellent math, computer, and Web skills. The job will involve preparation of traditional and Web-based homework, lecture and recitation materials, and an active role in administering and providing supplementary teaching for two courses. Responsibilities will include instructing biology students in UNIX and Perl as well as the use of Web-based computational biology tools. The position offers the opportunity to participate in a nascent biology curriculum development group and to interact with research groups in the Departments of Biology, Bioengineering, and Electrical Engineering and Computer Science. To apply, send a statement of career goals and relevant experience, curriculum vitae, and three letters of recommendation to: **Mary Markel Murphy, MIT Biology Department, MIT 68-132, 77 Massachusetts Avenue, Cambridge, MA 02139.**

BIOCHEMISTRY OR BIOORGANIC FACULTY POSITION, Middlebury College: The Department of Chemistry and Biochemistry at Middlebury College invites applications for a tenure-track position beginning fall 2003 in the area of biochemistry. Ph.D. Chemists, Biochemists, or Molecular Biologists with background and interests in experimental biochemistry are encouraged to apply. The successful candidate should be committed to excellence in both scholarship and teaching in the context of a liberal arts curriculum. Teaching requirements include lecture and laboratory courses in biochemistry, general or organic chemistry, an upper-division elective of choice and, periodically, a winter term course or First Year Seminar. The successful candidate is expected to establish an externally funded research program that includes undergraduates. Completed application should include curriculum vitae, statements of teaching and research interests, undergraduate and graduate transcripts, a sample of scholarly work, and at least three current letters of recommendation that speak to experience as a teacher and potential for developing a research program. All materials should be sent to: **Jeffrey Byers, Chair, Department of Chemistry and Biochemistry, Middlebury College, Middlebury, VT 05753** and must be received by October 15, 2002. *Middlebury College is an Equal Opportunity Employer and it encourages applications from women and members of minority groups.*

FACULTY POSITIONS Biochemistry and Molecular Biology New York Medical College

The Department of Biochemistry and Molecular Biology invites applications for two faculty positions, one at the **ASSISTANT PROFESSOR** level and one at an open rank. Candidates will be expected to develop or have vigorous research programs and a strong commitment to excellence in the teaching of medical and graduate students. New York Medical College is situated on an attractive campus in Westchester County about 20 miles north of New York City. Applicants should send curriculum vitae, a statement of research accomplishments and interests, reprints of three papers, and have three letters of reference forwarded to: **Dr. Ernest Y.C. Lee, Chairman, Department of Biochemistry and Molecular Biology, New York Medical College, Valhalla, NY 10595.**

New York Medical College is an Equal Opportunity Employer.

POSITIONS OPEN

BIOPHYSICAL CHEMIST East Carolina University

Applications are invited for a tenure-track position at the rank of **ASSISTANT PROFESSOR** to commence August 25, 2003, in the area of biophysical chemistry. A Ph.D. is required; postdoctoral experience preferred. The successful candidate will be expected to establish an innovative and externally funded research program and to participate in the Department's teaching mission at both the undergraduate and graduate levels. Appropriate professional service is also expected. The Department of Chemistry offers B.A., ACS-accredited B.S., and M.S. degrees. Applicants with experience in the application of NMR spectroscopy to research problems of biological significance are particularly encouraged to apply. NMR facilities include state-of-the-art Varian 500 and 300 MHz spectrometers. Candidates for this position should submit curriculum vitae, description of proposed research (including equipment needs), teaching philosophy, graduate transcripts, and arrange for three letters of recommendation to be sent to: **Search Committee, Biophysical Position, Department of Chemistry, East Carolina University, Greenville, NC 27858-4353.** Screening will begin October 7, 2002, and continue until the position is filled. Visit our website: <http://www.ecu.edu/chem>. *An Equal Opportunity/Affirmative Action University. Accommodates individuals with disabilities. Applicants must comply with provisions of the Immigration Reform and Control Act. Official transcript is required upon employment.*

OTS ACADEMIC DIRECTOR

The Organization for Tropical Studies, a consortium of 65 universities and research institutions, invites applications for a senior leadership position. The Academic Director oversees a growing portfolio of field-based courses in Costa Rica, Brazil, Peru, Panama, Mexico, and South Africa for graduate students, undergraduates, and professionals. Responsibilities also include programmatic fund-raising and administering a research Fellowship program. Applicants should hold a Ph.D. and have at least five years of relevant education experience. The position is based at OTS' North American office at Duke University and reports directly to the OTS CEO. For further information, see website: <http://www.ots.duke.edu> or contact OTS. Please send (1) letter of application with details of administrative and educational experience, (2) curriculum vitae, and (3) names and contact information of three references to: **Dr. Gary Hartshorn, OTS President and CEO, Box 90630, Durham, NC 27708-0630.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION Department of Molecular and Cellular Biochemistry The Ohio State University

Postdoctoral positions available immediately in a well-established laboratory to work on promoter methylation and silencing of growth suppressor genes and transcriptional control mechanisms in cancer and other diseases. A Ph.D. degree in biochemistry or molecular biology with experience in molecular biology techniques as evidenced by one or two publications is essential. Applicants must already possess at least a J1 visa. Recent publications include *JBC* 274:28584-28589; 275:539-547; *MCB* 21:8301-8317; *JBC* 277:16048-16058; *Prog. Nucleic Acid Res. Mol. Biol.* 66:357-384. Highly competitive salary and benefit package. Send curriculum vitae (as attachment) and names of three references to e-mail: tauber.2@osu.edu; FAX: 614-688-5670. *The Ohio State University is an Equal Opportunity Employer.*

FACULTY POSITIONS

The University of Sint Eustatius, School of Medicine, on the island of Sint Eustatius in the Dutch Caribbean, has openings at the **ASSISTANT PROFESSOR** level for M.D.s or Ph.D.s in the Department of Anatomy. Interested parties should send curriculum vitae and references to: **C. Frank Chambers, M.D., Managing Director; e-mail: drchambers@eustatiusmed.edu; Telephone: 202-903-5881.**

GLOBAL OPPORTUNITIES

NATIONAL CENTRE FOR CELL SCIENCE, PUNE

(An autonomous Institution
of the
Department of Biotechnology,
Government of India)

NCCS is devoted to research and development in Modern Biology and Biotechnology. The Centre is looking for various outstanding Scientists in areas of cell biology, developmental biology and tissue engineering. Candidates should have published work of high quality. Applicant must possess a doctoral degree or equivalent and should be an Indian citizen. For position, salary & age limit the applicants are requested to contact at the address given below. Applicant should send a CV mentioning a summary of research work carried out, area of interests and goals as well as three letters of reference to :

Director
National Centre for Cell Science
Ganeshkhind, Pune - 411 007
Maharashtra, India

Fax No. 91-20-5697756 or 5692259
E-mail : gcmishra@nccs.res.in

The complete C. V. should reach us within two months of appearance of this advertisement.

GLOBAL OPPORTUNITIES

KUWAIT UNIVERSITY

Department of Biological Sciences at Faculty of Science – Kuwait University announces a position for staff members in:

The field of Mammalogy.

- Ph.D. or equivalent in Zoology, majoring in Mammalogy, preferably desert mammals, from an accredited university.

The field of Desert Ecology.

- Ph.D. or equivalent in Zoology, majoring in Desert Ecology, from an accredited university.

Position conditions:

1. At least 5 years experience in teaching.
2. An excellent research conducting capability.
3. Experience in teaching chordates, mammalian taxonomy and biology behavior and biodiversity.
4. Experience in supervising graduate students.
5. Excellent skills in English.
6. Preference will be for associate and full professors.

Position benefits:

1. Tax-free salary.
2. Furnished accommodations with utilities paid.
3. Paid annual vacation, health insurance, round trip tickets for the staff member, the spouse, and 3 of their children.
4. Research facilities and funds are provided with approved research projects.
5. Contract to commence February 1, 2003 or September 1, 2003 for a period of two years renewable.

Papers required for the position:

1. Personal C.V.
2. Address, e-mails, telephone numbers and fax for the applicant.
3. Three addresses for recommendations.
4. Photocopy of applicant's passport data pages.
5. Copies of academic qualification certificates (B.Sc., M.Sc., Ph.D.)
6. List of under- and postgraduate courses.
7. List of published papers with copies of the recent ones.

Please send your papers to: **Deans Office, Faculty of Science, Kuwait University, P.O. Box 5969, Safat, 13060, Kuwait.**

Last date for receiving applications is **October 15, 2002**

For more information: **Fax #: (965) 4847054; E-mail: biosc@kuc01.kuniv.edu.kw**

Mass Spectrometrists NIDDK, NIH/DHHS

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes. The Laboratory of Bioorganic Chemistry, NIDDK, NIH/DHHS, is seeking a chemist (GS-11) to operate and maintain a state-of-the-art mass spectrometry facility. The successful candidate will be responsible for operation and maintenance of a magnetic sector (JEOL SX102) and quadrupole (Finnigan 4600) mass spectrometer and will provide mass spectrometry services for biomedical researchers of the Laboratory of Bioorganic Chemistry and other personnel of NIDDK and NIH. A broad spectrum of compound types presents challenges and opportunities for the incumbent to make significant contributions to research projects. A degree in physical or life sciences and professional knowledge of biology, organic chemistry, and biochemistry related to mass spectrometry techniques, and experience in acquisition and interpretation of mass spectra. are required. The Laboratory of Bioorganic Chemistry is located on the main intramural campus of the NIH in Bethesda, Maryland, a suburb of Washington, D.C. Interested applicants should contact Ms. Deirdre Davis, National Institutes of Health, NIDDK Human Resources Office, 6707 Democracy Blvd., Suite 700N MSC 5451, Bethesda, MD 20892-5451 (301 496-4231). NIH is an equal opportunity employer. **Applications to be post-marked by September 13, 2002.**



POSITION in PROTEIN EXPRESSION

Department of Health and Human Services
National Institutes of Health
National Institute of Environmental Health Sciences
Research Triangle Park, North Carolina

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes.

The National Institute of Environmental Health Sciences, a major research component of the National Institutes of Health (NIH) and the Department of Health and Human Services, invites applications for a position to lead a core facility to express proteins for structural studies. The position is in the Laboratory of Structural Biology and will be filled at the level of a Staff Scientist who will work in support of existing research programs in the Institute's Division of Intramural Research. Applicants should have a doctoral level degree and experience in expression and purification of proteins in two or more of the following systems: bacteria, yeast, insect cells and mammalian cells. Also desirable is experience with N and C terminal sequencing and mass spectrometric and physical characterization of proteins and familiarity with methods to refold proteins. Salary will be commensurate with the experience and qualifications of the candidate. Federal benefits apply.

For additional information concerning this position, contact Dr. William Copeland, Search Committee Chair, at 919-541-4792 or copelan1@niehs.nih.gov. For laboratory information, access website <http://dir.niehs.nih.gov/dirlsb/>. Applications from women or minority groups are particularly welcome. Interested parties should submit curriculum vitae, list of publications, reprints of up to five representative publications, summary of past research and arrange for three letters of reference to be sent to the following address by September 30, 2002:

Ms. Tammy Locklear
Human Resource Management Branch (HNV02-25)
National Institute of Environmental Health Sciences
National Institutes of Health
P.O. Box 12233, Maildrop NH-01
Research Triangle Park, N.C. 27709
(919) 541-3317 locklea1@niehs.nih.gov

DHHS and NIH are Equal Opportunity Employers



**Chairperson
Department of Pharmacology
School of Pharmacy
University of Mississippi**

The School of Pharmacy, University of Mississippi (Oxford campus), seeks an individual to fill the position of Professor and Chair of the Department of Pharmacology. Candidates must have a Ph.D. in pharmacology or closely related field, a nationally recognized research program (as evidenced by a distinguished publication record and recurrent as well as current success in securing peer-reviewed extramural funding), extensive experience in graduate biomedical education, proven administrative skills, and a commitment to excellence in pharmacy education. Responsibilities include overall direction of the department, facilitation and enhancement of the research, teaching and service activities of the departmental faculty as well as facilitating departmental interaction with the faculties of the Environmental Toxicology Research Program and National Center for Natural Products Research. The chairperson will head a department that currently includes eleven members with primary or joint (5) appointments and with diverse research interests in pharmacology and toxicology. The department has teaching responsibilities in several degree programs, including the B.S. in Pharmaceutical Sciences, M.S. in Pharmaceutical Sciences, and a Ph.D. with emphasis in pharmacology or toxicology. It is likely that the new chair will have the opportunity to recruit additional full-time faculty.

The desired appointment date is July 1, 2003. Applications and nominations will be considered until the position is filled or until an adequate applicant pool is established. The search committee will begin reviewing applications on October 1, 2002. Applicants should provide curriculum vitae, brief statements of research, teaching, and administrative interests and philosophies, a copy of his/her most exemplary publications (minimum of three), and the names and contact information of four professional references to: **Business Manager, School of Pharmacy, University of Mississippi, University, MS 38677.**

Professional, cultural, and community information is available at www.olemiss.edu/depts/pharm_school, www.olemiss.edu, and www.oxfordms.com.

*The University of Mississippi is an EEO/AA/Title IX/Section 504/
ADA/ADEA Employer.*



**TECHNISCHE
UNIVERSITÄT
DRESDEN**

Am **FORSCHUNGSZENTRUM ROSSENDORF e.V. (FZR)** ist zum **01. März 2003** in einem gemeinsamen Berufungsverfahren die Stelle

des/der Wissenschaftlichen Direktors/-in

verbunden mit einer

**C4-Professur
an der Technischen Universität Dresden**

wiederrubsetzen (Nachfolge Professor Frank Pobell).

Der Wissenschaftliche Direktor bildet gemeinsam mit dem Kaufmännischen Direktor den Vorstand, der für die Gesamtleitung des FZR verantwortlich ist. Er ist zugleich Sprecher des Vorstands und wissenschaftlicher Repräsentant des FZR.

Das **FORSCHUNGSZENTRUM ROSSENDORF** liegt im unmittelbaren Umfeld von Dresden und ist eine Einrichtung der Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz (WGL) mit insgesamt etwa 620 Mitarbeitern. Seine Aufgabe bildet die anwendungsorientierte Grundlagenforschung in den Schwerpunktbereichen Materialforschung, Biomedizin/-chemie, Radioökologie, Sicherheitsforschung sowie Kern- und Strahlungsphysik. Das FZR arbeitet mit Hochschulen, außeruniversitären Instituten und der Industrie zusammen. Die Arbeiten werden in fünf wissenschaftlichen Instituten durchgeführt, unterstützt durch zwei wissenschaftlich-technische Zentralabteilungen. Das FZR betreibt in den genannten Schwerpunktbereichen größere Experimentiereinrichtungen.

Die Aufgabe verlangt eine Persönlichkeit, die auf einem der Forschungsgebiete des FZR ausgewiesen ist und die Qualifikation für die Leitung eines größeren, interdisziplinär arbeitenden Forschungszentrums besitzt. Die Bewerber/-innen müssen die Berufsvoraussetzungen gemäß § 40 SächsHG (Sächsisches Hochschulgesetz) vom 11.06.1999 erfüllen.

Die Bestellung zum Wissenschaftlichen Direktor des FZR erfolgt für die Dauer von 5 Jahren; Wiederbestellung ist möglich.

Frauen sind ausdrücklich zur Bewerbung aufgefordert. Bewerbungen Schwerbehinderter werden bei gleicher Eignung bevorzugt berücksichtigt. Die Bewerbungsunterlagen werden den zuständigen Gremien der TU Dresden und des Forschungszentrums Rossendorf e.V. zugänglich gemacht.

Ihre Bewerbung mit Lebenslauf, Zeugnissen, Veröffentlichungsliste und einer kurzen Darstellung der bisherigen wissenschaftlichen Tätigkeit, die selbstverständlich vertraulich behandelt wird, richten Sie bitte in zweifacher Ausfertigung bis zum **30.09.2002** (Poststempel) an den Vorsitzenden der Berufungskommission:

TU Dresden, Rektor - Herrn Prof. Dr. Achim Mehlhorn (persönlich) -, 01062 Dresden.

SYMPOSIA

**Viktor Hamburger Symposium I
ONTOGENY OF THE MOTOR
SYSTEM:
from Neurogenesis to Behaviour**

**Friday 1 November - Saturday 2
November 2002
Rosen Centre, Orlando, Florida USA**

Invited Speakers: C. Beattie, A. Bekoff, P. Berger, B. Bregman, P. Drapeau, J. Fentress, G. Fortin, L. Landmesser, H. Nishimaru, M. O'Donovan, R. Oppenheim, S. Pfaff, H. Prechtl, R. Provine, S. Robinson, K. Sillar and E. Thelen.

The program will cover the genesis of neurons, the establishment of their functional connections, the involvement of cell death in the morphogenesis and function of the nervous system, and the ontogeny and neural basis of complex behaviours.

Students and post-docs may be eligible for travel assistance.

Registration and Abstract Deadline:
27 September 2002

Information available at: <http://www.ritchiecentre.monash.org/neuro>
or contact Secretariat:
mary.kyriakides@med.monash.edu.au



**FRED HUTCHINSON
CANCER
RESEARCH
CENTER**

Advancing Knowledge, Saving Lives

**JUNIOR
FACULTY
POSITION**

The Divisions of Human Biology and Public Health Sciences at the Fred Hutchinson Cancer Research Center are soliciting applications to fill a junior faculty position in the area of Cancer Biology. Applicants with outstanding accomplishments in the molecular biology, cellular biology, or genetics of cancer are encouraged to apply. We are particularly interested in applicants whose research may involve interactions with epidemiologists, biostatisticians or prevention researchers.

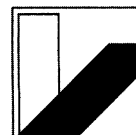
The FHCRC is located on a new lakeside campus and occupies state-of-the-art research laboratories. The Center offers outstanding shared resources, including DNA array and sequencing facilities. The Center has active graduate-student and postdoctoral training programs and offers an outstanding scientific environment.

Additional information about the Divisions can be found at: http://www.fhcrc.org/science/human_biology/
<http://www.fhcrc.org/phs/>

Candidates should send a curriculum vitae, a concise statement of research plans, and three letters of reference to: **HB/PHS Joint Faculty Search Committee, Fred Hutchinson Cancer Research Center, MS: C3-168, 1100 Fairview Ave. N, P.O. Box 19024, Seattle WA 98109.**

The application deadline is **October 15, 2002.**

The Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer committed to work force diversity. Applications from women and/or minority candidates are strongly encouraged.



**UNIVERSITÄT
BAYREUTH**

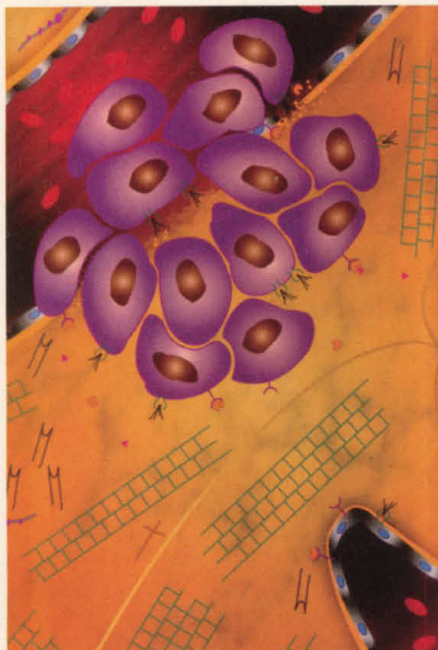
**Full Professor
Inorganic Chemistry**

The University of Bayreuth, Germany, is seeking a senior scientist for a tenured full professorship in Inorganic Chemistry. Extensive opportunities exist for collaboration in the fields of New Materials, Macromolecular and Colloidal Chemistry, and Molecular Life Sciences. Research facilities in the field of Solid State Chemistry are excellent. The successful candidate is expected to participate in teaching the full curriculum of Inorganic Chemistry.

A Ph.D., postdoctoral experience, and demonstrated productivity in research and teaching are required. Salary is according to C4 of the German government scale. The University of Bayreuth is an equal opportunity employer, and applications by women and physically handicapped are strongly encouraged.

Applications including cv, list of publications, five reprints, and a short description of research plans and teaching experience should be sent by **Oct 15** to **Dr. Paul Rösch, Dean, Faculty II of Natural Sciences, University of Bayreuth, 95447 Bayreuth, Germany, paul.roesch@uni-bayreuth.de +49 921 553540.** Inquiries are welcome.

Outstanding Conferences from the AACR this Fall - Register Now!



Proteases, Extracellular Matrix, and Cancer

October 9-13, 2002
The Westin Resort, Hilton Head Island, SC

Chairpersons:

Yves A. DeClerck, Childrens Hospital
Los Angeles, Los Angeles, CA

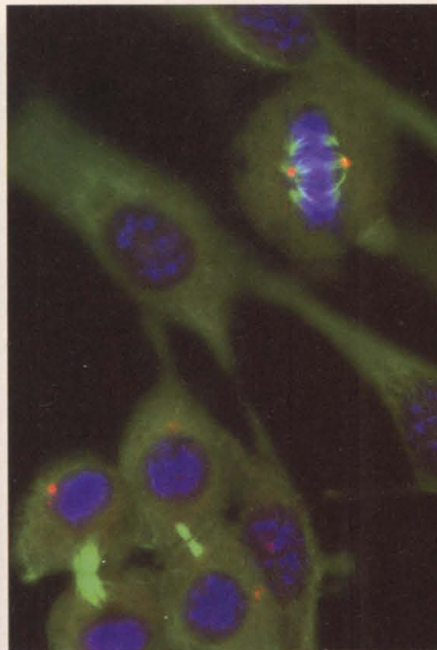
Ruth J. Muschel, University of Pennsylvania
School of Medicine, Philadelphia, PA

Abstract Deadline:

September 6, 2002

Advance Registration Deadline:

September 10, 2002



Ubiquitination in Normal and Cancer Cells

October 30-November 3, 2002
Westin Bayshore Resort and Marina,
Vancouver, BC, Canada

Chairpersons:

James M. Roberts, Fred Hutchinson Cancer
Research Center, Seattle, WA

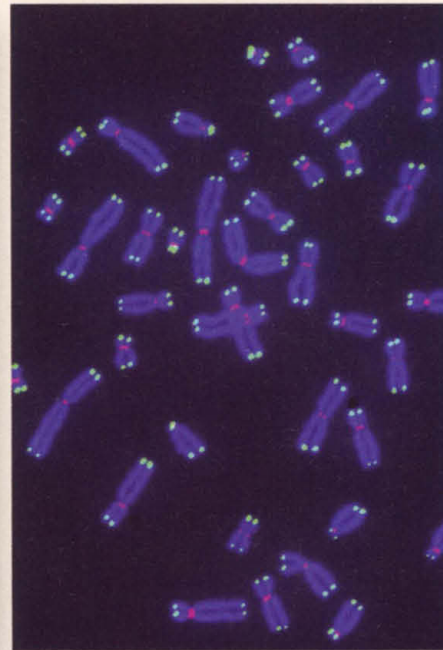
Raymond J. Deshaies, California Institute of
Technology, Pasadena, CA

Abstract Deadline and

Advance Registration

Deadline:

September 13, 2002



The Role of Telomeres and Telomerase in Cancer

December 7-11, 2002
Hyatt Regency Hotel, San Francisco, California

Chairpersons:

Jerry W. Shay, University of Texas Southwestern
Medical Center, Dallas, TX

Elizabeth H. Blackburn, University of California,
San Francisco, San Francisco, CA

Abstract Deadline:

September 16, 2002

Advance Registration Deadline:

November 4, 2002

**For complete
program information,
to submit an abstract,
or to register online,
visit www.aacr.org**

AACR American Association
for Cancer Research

Public Ledger Building • Suite 826 • 150 S. Independence Mall West
Philadelphia, PA 19106-3483 • 215-440-9300 • Fax: 215-351-9165
E-mail: meetings@aacr.org • www.aacr.org

POSITIONS OPEN

MICROBIOLOGIST
POSITION

Foodborne Contaminants Research Unit
USDA, ARS, Albany, California

A permanent full-time position is available to contribute to an ongoing, multidisciplinary research effort on the environmental microbiology of human pathogens. The candidate will focus on determining the environmental prevalence of foodborne pathogens and identify critical factors for survival, proliferation, and transmission from manure to crop environments. Development of novel techniques for detection and selective isolation of pathogens from animal manure and environments influenced by animal waste will be an integral component of this research. The position is offered at Series/Grade GS-403 12/13/14 (\$59,471 to \$108,642) and is open to U.S. citizens only. For application procedures, see Position Number ARS-X2W-2408 at website: <http://www.afm.ars.usda.gov/divisions/hrd/index.html>. For additional information, call the Personnel Office; Telephone: 510-559-6090. United States Department of Agriculture is an Equal Opportunity Provider and Employer.

POSTDOCTORAL RESEARCH
Synaptic Neurobiology
Colorado State University

The Molecular, Cellular, and Integrative Neuroscience Program offers Postdoctoral opportunities utilizing modern techniques in collaborative projects among the laboratories of J.R. Bamberg, K.G. Beam, F.E. Dudek, R.J. Handa, D.N. Ishii, K.M. Partin, and M.M. Tamkun. A strong desire to do creative science and a record of research accomplishment are important. Further information is available at website: <http://www.cvmbs.colostate.edu/mcin/>.

Positions filled beginning October 1, 2002. Please send cover letter, résumé, two reprints, and three letters of reference to:

Dr. J. R. Bamberg, MCIN Training
Department of Biochemistry and
Molecular Biology
Colorado State University
Fort Collins, CO 80523-1870
E-mail: jbamberg@lamar.colostate.edu

Colorado State University is an Equal Employment Opportunity/Affirmative Action Employer. Equal Employment Opportunity office: 101 Student Services. Applicants must be U.S. citizens or permanent residents.

POSTDOCTORAL POSITION is available immediately to study male/female microchimerism in patients with malignancies. Recent graduates with biology training are encouraged to apply. Send curriculum vitae and references to:

Richard K. Shaddock, M.D.
Vice Chairman, Human Oncology
Allegheny Cancer Center
320 East North Avenue
Pittsburgh, PA 15212
FAX: 412-359-6263
E-mail: rkshaddu@wpahs.org

A POSTDOCTORAL POSITION is available immediately in a well-funded research laboratory for highly motivated individual interested in studying human genetic diseases. Systems include stem cell, animal models, and immunohistology. Applicants must have Ph.D. and/or M.D. and a strong background in molecular biology/cell biology. Send curriculum vitae and names of three references to: Dr. Guanjing Wu, Department of Medicine, Division of Genetic Medicine, Vanderbilt University, 529 Light Hall, 2215 Garland Avenue, Nashville, TN 37232-0275. E-mail: guanjing.wu@vanderbilt.edu.

POSITIONS OPEN

SENIOR RESEARCH ASSOCIATE
Nonprofit Hospital in Central Ohio

Job duties: Creation of genetically modified and gene-targeted animal models through the use of DNA and ES cell microinjection technologies. Embryonic stem cell culture including isolation and culture of mouse embryonic fibroblasts, culture and transfection of embryonic stem cells, and identification and selection of targeted clones. DNA procedures including isolation, purification, and quantitation. Micromanipulation including DNA and ES cell microinjection. Breeding and maintenance of mutant mouse colonies, setting up breeding pairs, superovulation, weaning offspring, and maintaining a tracking database. Microsurgery including isolation of embryos, oviduct transfers, c-sections, vasectomy, etc. Cryopreservation and regeneration. Maintain records and prepare reports and presentations. Instruct and provide guidance to immunology, genetics, and cancer researchers in stem cell culture, targeting strategies, sample preparation, use of microinjection equipment, and other techniques. Purchasing and budget reconciliation. Planning and coordination of day-to-day work with Researchers and Principal Investigators. Initiate research projects and confer with Principal Investigators regarding project status. Establish experimental and control groups and compare laboratory analyses of specimens and samples to desired experimental results. Job requirements: Applicants must have a Master's degree in biological/pharmaceutical science/molecular biology, or genetics and two years of experience in job offered or in the following: proficiency in DNA procedures including isolation, purification, and quantitation; cryopreservation and regeneration; transfection, identification, and selection of targeted clones; embryonic stem cell and fibroblast cell culture; initiate research projects; and confer with Principal Investigators regarding project status, maintain records and prepare reports and presentations. Experience in DNA and ES cell microinjection techniques and microsurgery skills. Hours: Monday through Friday; 40 hours per week; 9 a.m. to 6 p.m. Rate of pay: \$20.28 per hour. Send two résumés and cover letters (no calls) to: REF#9800JED, P.O. Box 16808, Columbus, OH 43216.

CEDPA is contracted by USAID to provide TECHNICAL ADVISORS in AIDS and child survival (TAACS) to USAID offices overseas and in Washington, D.C. This position requires U.S. citizenship. Security clearance will be required. HIV/AIDS Senior Policy and Technical Advisor USAID/Uganda Position located in Kampala. Responsible for providing technical leadership in the design, implementation, monitoring, and evaluation of HIV/AIDS activities funded by USAID/Uganda. Will also serve as USAID/Uganda Senior Advisor to the Ministry of Health, Uganda AIDS Commission, and other partners. Minimum five years of experience in HIV/AIDS field; a thorough understanding of its impact and appropriate responses for Africa essential. Demonstrated experience in design, implementation, and evaluation of health education programs with emphasis on HIV/AIDS prevention and care interventions required. Experience conducting epidemiological/operational research preferred. Doctoral degree in public health and experience with USAID highly desired. Must possess strong oral and written skills. Familiarity with USAID preferred. Excellent benefits. Send résumé/curriculum vitae and cover letter to FAX: 202-667-4371; e-mail: taacsjobs@cedpa.org. Please reference where you saw this job listing.

ASSOCIATE RESEARCH SCIENTIST, Yale University, Department of Psychiatry. Five-year NIMH funding to map EEG and evoked potentials from surface and depth electrodes onto MRI. Ongoing research includes ERPs in schizophrenia and cocaine abuse and TMS measures of cortical excitability. Ample time for the candidate to pursue his/her own projects. Yale is a very intense research environment. For more information, please e-mail: nash.boutros@yale.edu.

POSITIONS OPEN

SENIOR RESEARCH ASSOCIATE
Department of Radiation Oncology

Seeking a Senior Research Associate to design and execute experiments, conduct literature searches, assist in writing manuscripts, and manage the laboratory. Studies will involve investigating molecular mechanisms in the development and treatment of cancer by examining gene expression profiles of tissues during carcinogenesis and identifying biomarkers for treatment. Doctoral or Master's degree with two years of experience in cancer biology or related area required. Experience in molecular biology, cell biology, and rodent bioassays desirable. Contact: Medical College of Wisconsin, Attention: Employment Office-RASRO, 8701 Watertown Plank Road, Milwaukee, WI 53226. FAX: 414-456-6502; Jobline Telephone: 414-456-8193; e-mail: mcw_emp@mcw.edu; website: <http://www.mcw.edu/hr>.

Equal Opportunity Employer; Minorities/Females/Disabled/Veterans.

CARDIOVASCULAR PHARMACOLOGIST:

Procter & Gamble Pharmaceuticals is seeking Cardiovascular Scientists with strong leadership skills to lead multidisciplinary project teams in the discovery and characterization of novel antiarrhythmic drugs. Candidates must be able to establish clear project strategies, resolve and identify key project issues, and develop nonclinical procedures to screen and select lead compounds for transition to clinical development. Candidates must have a Ph.D. in pharmacology or a related field or a D.V.M. and must have at least four years of industrial experience in drug development. Prior supervisory experience of multiple direct reports, proven expertise in *in vitro* and *in vivo* cardiovascular physiology/pharmacology, prior experience in developing antiarrhythmic drugs, and the ability to work well in a team environment are required. Candidates must have strong interpersonal and communication skills to excel in the leadership and supervisory roles. To apply, please complete an online application form at website: <http://www.pg.com/jobs/sectionmain.jhtml> and refer to Job RD00000040. Procter & Gamble is an Equal Opportunity Employer.

LABORATORY MANAGER POSITION is currently available to study and manage projects concerning the molecular and cellular biology of human pancreatic cancer including cell cycle and apoptosis regulatory checkpoints. A Ph.D. or M.D./Ph.D. degree is required with experience in cell culture and molecular and cell biology techniques. The candidate should have three to five years of postdoctoral experience with a solid publication record and excellent written, verbal, and organizational skills. Send résumé to: Mark P. Callery, M.D., Chief, Division of General Surgery, Beth Israel Deaconess Medical Center and Harvard Medical School, ST928, 330 Brookline Avenue, Boston, MA 02215. E-mail: mcallery@caregroup.harvard.edu.

YALE IMMUNOHEMATOLOGY RESEARCH FELLOWSHIPS.

The Yale Department of Laboratory Medicine offers Research Fellowships in immunohematology, working with a Yale faculty mentor. Candidates with an M.D. or M.D./Ph.D. and a desire for a Physician-Scientist career are especially encouraged to apply. Individuals with Ph.D. degrees and an interest in academic laboratory medicine are also encouraged. Candidates must meet requirements for a NIH NRSA award. For more information, see website: <http://info.med.yale.edu/labmed/fellowships.html>. To apply, send curriculum vitae and information for three references to: Brian R. Smith, M.D., Yale School of Medicine, P.O. Box 208035, New Haven, CT 06520-8035. Yale University is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

GRANTS

Creating the future of biotech—Together

Invitrogen's Research Tools Development Grants Program provides funding for investigators developing innovative tools for use in life science research. Total funding is US\$5 million per year, with annual individual awards of up to US\$100,000. Grants are provided quarterly.

Third quarter 2002 funding is for novel approaches in the **separation and purification** of biomolecules. Proposals to develop enrichment, fractionation and labeling technologies are also of interest. Deadline for full Grant Proposals is September 1. A preproposal is required. For more information, visit www.invitrogen.com, e-mail grants@invitrogen.com, or call 800 955 6288, ext. 66140.

1600 Faraday Ave., Carlsbad, CA 92008 USA
P: 760 476 6140 F: 760 602 6563
www.invitrogen.com



AWARDS



New Funding Opportunities FOR PROSTATE CANCER RESEARCH

CaP CURE, The Association for the Cure of Cancer of the Prostate is a public charity with a single mission: **to eradicate prostate cancer as a health risk to men and their families**. CaP CURE will now modify its research funding strategy to focus greater resources on programs that promise high levels of multidisciplinary intra- and inter-institutional collaboration.

We are now funding two new types of research awards:

- Expanded Competitive Award.** Proposals will be entertained for highly novel prostate cancer research programs with an expanded scope. Applicants should consider multi-disciplinary approaches involving significant intra- and inter-institutional collaboration. We will not fund programs that are simple extensions of work in progress. The successful applicant will propose a highly coordinated research program with potential for near term translation to the clinic or immediate clinical application. These awards are for one year and will be budgeted up to \$500,000 each. Deadline for submission will be September 6, 2002.
- Donald S. Coffey-CaP CURE Physician-Scientist Award.** This new program replaces the CaP CURE Young Investigator Award and reflects forward integration of our programs toward patient care. The successful candidate will maintain a clinical practice caring for prostate cancer patients and an active, recognized prostate cancer research program based in the clinic or laboratory. These awards will provide support for three years at the rate of \$50,000 per year. Deadline for submission will be June 1, 2003.

Instructions for submission of these applications may be found at www.capcure.org. For additional information contact **Dr. Howard Soule** at capcuregrants@capcure.org.

Winter Biotech Meetings at Cold Spring Harbor



Harborside picnic at the CSHL Cardiovascular Symposium, May 2002

Tissue Engineering

November 21 - 24 abstracts due: September 18

Organized by:

Farshid Guilak, Duke University Medical Center
Rocky Tuan, National Institute of Arthritis,
Musculoskeletal & Skin Diseases

Therapeutic Opportunities in Neurodegenerative Diseases

December 5 - 8 abstracts due: October 2

Organized by:

Sam Gandy, Thomas Jefferson University
Harry Levine III, Pfizer, Inc.
Marcy MacDonald, Massachusetts General Hospital /
Harvard Medical School

Comparative Plant Genomics

December 12 - 15 abstracts due: October 9

Organized by:

Mike Bevan, The John Innes Centre, UK
Susan McCouch, Cornell University

Summer & Fall 2002 CSHL Meetings

- **Cancer Genetics and Tumor Suppressor Genes** Aug 14 - 18
 - **Molecular Genetics of Bacteria & Phages** August 20 - 25
 - **Mouse Molecular Genetics** August 28 - September 1
 - *** Translational Control** September 10 - 15
 - **Dynamic Organization of Nuclear Function** Sept 18 - 22
 - **Axon Guidance and Neural Plasticity** September 25 - 29
 - **Molecular Genetics of Aging** October 2 - 6
 - **Germ Cells** October 9 - 13
 - **Human Origins & Disease** October 30 - November 3
- * Oversubscribed. Please call for availability

Cold Spring Harbor Laboratory

Meetings & Courses Programs

1 Bungtown Road, Cold Spring Harbor, NY 11724

www.cshl.edu/meetings Tel: (516) 367-8346

Fax: (516) 367-8845 email: meetings@cschl.edu

POSITIONS OPEN

NIH-funded **POSTDOCTORAL POSITIONS** available at the Center for Advanced Research in Biotechnology (CARB) for Biochemists/Molecular Biologists with recent Ph.D.s to join multidisciplinary team investigating molecular basis of (1) ligand recognition by antibodies, T cell receptors (TCRs), and natural killer (NK) cell receptors and (2) T cell signal transduction by intracellular signaling complexes. Projects include (1) study of antibody specificity by site-directed mutagenesis and phage display; (2) X-ray crystallographic and solution-binding studies of recombinant TCRs, MHC molecules, and superantigens; (3) structural and binding studies of NK cell receptors; and (4) assembly and structure of LAT-based multiprotein T cell signaling complexes (*Nature* 384:188, 1996; *Nature* 391:502, 1998; *Immunity* 9:807, 1998; *Immunity* 10:473, 1999; *Annu. Rev. Immunol.* 17:435, 1999; *Nature* 402:623, 1999; *Biochemistry* 39:15375, 2000; *J. Mol. Biol.* 304:177, 2000; *Immunity* 14:93, 2001; *Curr. Opin. Immunol.* 14:36, 2002; *Structure* 10:687, 2002; *Annu. Rev. Immunol.* 20:853, 2002). See website: <http://www.carb.nist.gov/mariuzza.html> for further information. Experience in heterologous protein expression in bacterial and/or eukaryotic cells or in BIAcore/sedimentation equilibrium/calorimetry highly desirable. CARB, a joint research center of the National Institute of Standards and Technology and the University of Maryland, is located in the heart of a major biotechnology community that includes TIGR, Celera, and Human Genome Sciences. Excellent opportunities for collaborative studies with X-ray Crystallographers and Physical Biochemists. Send curriculum vitae and names of three references via e-mail: mariuzza@carb.nist.gov or to: Dr. Roy Mariuzza, CARB, 9600 Gudelsky Drive, Rockville, MD 20850.

POSTDOCTORAL POSITIONS in single-molecule spectroscopy and near-field imaging microscopy available immediately for studying single-molecule dynamics, electron transfer dynamics, redox reactivity at cellular membranes, and receptor protein signaling in living cells. Experience in one of the fields of physical chemistry (ultrafast and nonlinear spectroscopy, fluorescence, TCSPC, Raman, or AFM/STM) or biophysics (protein dynamics, cell membranes, and lipid bilayers) is desired. If interested, please respond via e-mail: peter.lu@pnl.gov or send curriculum vitae and three letters of reference to: Dr. H. Peter Lu, Pacific Northwest National Laboratory, P.O. Box 999, MSIN K8-88, Richland, WA 99352. PNNL is operated by Battelle for the U.S. Department of Energy and is an Affirmative Action/Equal Opportunity Employer and supports diversity in the workplace.

MOLECULAR IMMUNOLOGISTS POSITION: The Receptor Cell Biology section of NIAID, NIH, is recruiting for **POSTDOCTORAL FELLOWS** for studies on natural killer cell receptor expression and function. Emphasis is on the interplay of activating and inhibitory receptors, receptor trafficking, regulation of expression, and signal transduction. Salary based on relevant experience and education. Qualified and interested candidates should send curriculum vitae and three letters of reference. For more information regarding these positions, contact:

John E. Coligan, Ph.D.
Laboratory of Allergic Diseases
Receptor Cell Biology Section, NIAID/NIH
Twinbrook II, Room 205 MSC 8180
12441 Parklawn Drive, Rockville, MD 20852
Telephone: 301-496-8247; FAX: 301-480-2818
E-mail: jcoligan@niaid.nih.gov

NIH is an Equal Opportunity Employer.

POSITIONS OPEN

THE ROBERT E. GOSSELIN AWARD FOR POSTDOCTORAL RESEARCH Molecular Pharmacology and Toxicology Dartmouth Medical School

In honor of our founding chairman, Dr. Robert E. Gosselin, the Department of Pharmacology and Toxicology at Dartmouth Medical School is pleased to accept applications for this prestigious **POSTDOCTORAL FELLOWSHIP**. The goal of this Fellowship program is to prepare an exceptional candidate for a career in academic science by providing an outstanding scientific environment with close clinical contacts. This Fellowship offers three years of financial support starting at \$40,000 per year and additional discretionary funds for conference travel and a computer. The successful candidate will have completed a Ph.D. or M.D./Ph.D. program in the past 12 months or is planning on receiving his/her degree within the coming 12 months. Candidates are asked to submit (1) curriculum vitae with contact information for three references, (2) a statement describing their Doctoral training and future research interests, and (3) a letter identifying a specific faculty member(s) with whom the candidate would like to conduct postdoctoral research.

These items should be sent to: Joyce A. DeLeo, Ph.D., Department of Pharmacology and Toxicology, 7650 Rensselaer, Hanover, NH 03756.

For detailed information on this award and a listing of the diverse and exciting research opportunities within the Department, please visit our departmental website: <http://www.dartmouth.edu/dms/pharmtox>.

Dartmouth, an Equal Opportunity/Affirmative Action Employer, strongly encourages applications from women and minority candidates.

MRI/MRS POSTDOCTORAL POSITIONS The Center for Advanced Imaging Research Medical University of South Carolina

Positions require solid technical backgrounds in MR imaging and/or spectroscopy.

Projects involve MR physics; simulations of magnetic and electric fields; and/or data analysis related to MR image and spectroscopy-based determinations of brain functions including studies of diffusion, perfusion, and quantitative flow/motion (ability to perform computations of magnetic fields and currents induced in the brain by TMS desired). This position could lead to a **JUNIOR FACULTY** position.

Send curriculum vitae, a letter describing research interests, and information for three references to:

Daryl E. Bohning, Ph.D., DABR
Department of Radiology
The Medical University of South Carolina
171 Ashley Avenue
Charleston, SC 29425
Telephone: 843-792-6171; FAX: 843-792-5067
E-mail: bohningde@musc.edu; website:
<http://www.musc.edu/psychiatry/fnrd/function.htm>

The Medical University of South Carolina is an Equal Opportunity Employer. Employment eligibility authorization to work in the United States must be provided once an offer of employment has been made. Federal law and MUSC policy mandate a drug-free workplace.

POSTDOCTORAL POSITION available for a highly motivated Ph.D., M.D./Ph.D., or M.D. with strong interest in signal transduction or bone research to conduct functional studies of human disease genes (Reichenberger et al., *Am. J. Hum. Genet.* 68(6):1321-1326; Ueki et al., *Nat. Genet.* 28(2):125-126). E-mail curriculum vitae, research interests, and names of three references to: Ernst Reichenberger, Ph.D., University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3705. E-mail: reichenberger@uchc.edu.

The University of Connecticut Health Center is an Equal Opportunity Employer; Minorities/Females/Veterans/Persons With Disabilities.

POSITIONS OPEN

NIH 2002 = [OPPORTUNITY]^N

Train at the bench, the bedside, or both. The NIH offers **POSTDOCTORAL and CLINICAL FELLOWSHIPS** as well as tenure-track positions.

For details, visit our website:
www.training.nih.gov

NIH is dedicated to building a diverse community in its training and employment programs.

POSTDOCTORAL POSITIONS T Cell Immune Responses

Positions are available to study T cell immune responses and the mechanisms responsible for viral persistence in infections caused by HIV, HCV, and CMV as a part of ongoing clinical trials focused on immune-based therapies with cytokines and vaccines. Also, other studies are focused on the identification and evaluation of novel gene expression in response to T cell activation. There are opportunities and expectations that the candidates will develop independent basic research projects within these areas to synergize with existing clinical trial efforts. See website: <http://www.kendallasmith.com> for further information. Candidates should have a Ph.D. or M.D. degree and a strong background in cellular immunology, molecular immunology, and/or virology. Prior postdoctoral experience preferred. Please send curriculum vitae and contact information for three references to:

Kendall A. Smith, M.D.
Rochelle Belfer Professor of Medicine
and Immunology
Weill Medical College of Cornell University
1300 York Avenue, Box 41
New York, NY 10021
E-mail: kasmith@med.cornell.edu

POSTDOCTORAL ASSOCIATE, biogeochemistry, global modeling of nutrient transport by rivers. The Institute of Marine and Coastal Sciences at Rutgers University seeks a highly motivated Postdoctoral Scientist to work with an international team of Scientists to develop spatially explicit global models of nutrient (N, P, and Si) transport by rivers to coastal systems as a function of human activities and natural processes on land. Qualifications: A Ph.D. with a strong background in biogeochemistry and good computer and communication skills are required. Experience with GIS, databases, and modeling highly desirable. Position based at Rutgers with some travel within United States and internationally. Application deadline: September 30, 2002 (position will remain open until filled). Please send a letter describing interest in and qualifications for the position, curriculum vitae, selected reprints, and names and contact information for three references to: Sybil Seitzinger, Rutgers University, Institute of Marine and Coastal Sciences, 71 Dudley Road, New Brunswick, NJ 08901-8521 U.S.A. E-mail: sybil@imcs.rutgers.edu.

POSTDOCTORAL POSITION Subsurface Science Initiative

A position is available to study multiphase flow in complex fracture apertures using smoothed particle hydrodynamics, molecular dynamics, invasion percolation-based models, and other methods. The program will involve close collaboration with experimentalists at INEEL, Professor D.H. Rothman's group at Massachusetts Institute of Technology (lattice Boltzmann modeling) and the University of Oslo (experimental and computer modeling research in the Center for Physics of Geological Processes led by Professors J. G. Feder and B. Jamtveit).

Candidates should submit their résumés and have four letters of recommendation sent to: Idaho National Engineering and Environmental Laboratory (INEEL), Dr. Paul Meakin, INEEL, P.O. Box 1625, Mail Stop 2025, Idaho Falls, ID 83415-2025.

POSITIONS OPEN



Pennington Biomedical Research Center

Pennington Biomedical Research Center, a Louisiana State University facility, is accepting applications for **RESEARCH ASSOCIATE** and **POSTDOCTORAL RESEARCHER** positions. For information on employment options, see our website: <http://www.pbrc.edu>.

Pennington Biomedical Research Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Center for Space Research

Massachusetts Institute of Technology (MIT)

The MIT Center for Space Research has openings for two Postdoctoral Research Associates in the group of Professor Walter Lewin to actively participate in data reduction (image analysis and spectroscopy) using Chandra, XMM, and HST data. The candidates should have a strong background in observational astronomy with a proven ability to conduct independent research. Both positions require a Ph.D. in astronomy or physics. The appointments will be for two years, renewable for one to two additional years based on satisfactory performance.

Applicants should send curriculum vitae, bibliography and statement of research interests, and arrange to have three letters of recommendation sent. The application deadline is October 15, 2002. Interested candidates may apply online at website: <http://web.mit.edu/personnel/www/resume.htm>. If your do not have access to the Web, a cover letter and résumé may be submitted to: MIT Human Resources, Job Number 02-0651, P.O. Box 391229, Cambridge, MA 02139-0013. Equal Opportunity Employer.

NIH-funded **POSTDOCTORAL RESEARCH POSITION** is available immediately to study the molecular regulation of hepatic signal transduction pathways. Strong background in molecular biology and/or protein biochemistry is desirable. Candidate should have excellent writing and verbal skills. The laboratory is located in downtown Washington, D.C., with its unique recreational, social, cultural, and educational activities. Send curriculum vitae and names of three references to: Dr. Bernard Bouscarel, Department of Medicine and of Biochemistry and Molecular Biology, the George Washington University, 2300 Eye Street, N.W., Ross Hall Number 523, Washington, DC 20037. E-mail: dombeb@gwu.edu. An Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF MARYLAND, BALTIMORE

POSTDOCTORAL FELLOW to develop microbial risk assessment for food safety and criteria for risk ranking. Previous experience with risk assessment theoretical ecology or mathematical epidemiology is required. Highly motivated individuals are sought and encouraged to collaborate with faculty on public health-related issues. Contact: David Smith, Department of Epidemiology and Preventive Medicine, University of Maryland, Baltimore, 660 West Redwood Street, Baltimore, MD 21201. E-mail: dave@needles.umaryland.edu.

Full-time **POSTDOCTORAL RESEARCH POSITION**: angiogenesis and vascular biology laboratory (Roberto Nicosia, M.D., Ph.D., Principal Investigator) seeks applicants with expertise in molecular and cell biology to study mechanisms of blood vessel growth and survival. Knowledge of proteomics, DNA array technology, and *in vivo* transgenic studies desirable. Position requires a Ph.D. plus zero to three years of laboratory research experience. Competitive salary plus benefits. Send curriculum vitae to: Eric Fogel, Mailstop S-151, 1660 South Columbian Way, Seattle, WA 98108. E-mail: fogel.eric@seattle.va.gov. Equal Opportunity Employer.

POSITIONS OPEN

The California Academy of Sciences announces the **SCHLINGER FOUNDATION POSTDOCTORAL FELLOWSHIP** in systematic entomology. Summary: recipient to conduct collections-based systematics research on insects, arachnids, or myriapods and contribute to development of entomological collections at The California Academy of Sciences. Collection: Fellowship includes a significant curatorial component. See website: <http://www.calacademy.org/research/entomology/> or contact Curators for information. Contributions to Madagascar or Yunnan inventories will receive favorable consideration. Requirements: Requirements for receiving Ph.D. degree must be completed by closing date.

Submit application including project description (three pages excluding bibliography), timetable, budget, curriculum vitae, suggestions of curatorial contribution, and two letters of support to: Human Resources Department, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118 U.S.A. Job reference code for position is SPDF802. Application deadline is 31 August 2002.

Compensation/benefits: Duration is one to two years. Stipend: \$35,000 per year plus benefits and \$5,000 per year research allowance.

POSTDOCTORAL POSITION

BACTERIAL PATHOGENESIS: A Postdoctoral position is available immediately to study the molecular biology of chemotaxis by the syphilis spirochete *Treponema pallidum*. The research will exploit the use of *E. coli* and *Treponema denticola* as surrogate genetic systems. The position offers the opportunity to carry out research in an attractive, dynamic research environment with outstanding resources under the codirection of Drs. Michael V. Norgard and Kayla E. Hagman. Candidates should have evidence of a strong background in prokaryotic molecular biology and molecular genetics; experience in bacterial membrane biology and/or chemotaxis also is desirable. Please provide curriculum vitae and the names and addresses of three references to: Dr. Michael V. Norgard, Chairman, Department of Microbiology, University of Texas Southwestern Medical Center, 6000 Harry Hines Boulevard, Dallas, TX 75390-9048. Telephone: 214-648-5900; FAX: 214-648-5905; e-mail: michael.norgard@utsouthwestern.edu. University of Texas Southwestern Medical Center is an Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available for an NIH-funded research project on regulatory mechanisms in bone destruction in arthritis. This project focuses on transcriptional regulation of genes involved in bone remodeling, analysis of contributing cell types, and studies of bone erosion in animal models of arthritis. Candidates must have a Ph.D. or M.D. degree. A strong background in molecular biology and/or immunology is required. Experience in promoter analysis and transfection techniques is desired. Excellent collaborative research environment including genomics core facility. Applicants should provide a cover letter, curriculum vitae, and the names of at least three references to: Dr. E.M. Gravallese, Beth Israel Deaconess Medical Center, Harvard Institutes of Medicine, NE Baptist Bone and Joint Institute, 4 Blackfan Circle, Room 241, Boston, MA 02115. E-mail: egravall@caregroup.harvard.edu. BIDMC is an Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** at Massachusetts General Hospital/Harvard Medical School is currently available to study the pathogenesis of cutaneous melanoma. Candidates should have a strong background in molecular biology and molecular genetics along with training in cancer biology. Experience with either genomic technologies or murine cancer models is also desirable. Submit curriculum vitae and three references to: Dr. Hensin Tsao, c/o Ms. Sheronda Ponder-Jackson; e-mail: sponderjackson@partners.org.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study the cellular and molecular basis of tumor progression. The NIH-funded project will focus on investigating isoform-specific functions and biochemical mechanisms of PKC family proteins in the regulation of cell proliferation and survival. (Ding et al., JBC in press, 2002). Ph.D. with strong background in molecular/cell biology and protein chemistry required. Experience in signal transduction preferred. Please send curriculum vitae and three references to: Lei Xiao, Ph.D., University of Florida Shands Cancer Center, Box 100232, 1600 Southwest Archer Road, Gainesville, FL 32610-0232. E-mail: lxiao@ufl.edu.

POSTDOCTORAL POSITION available December 1, 2002, to study structural and functional aspects of interactions among nitric oxide synthases, soluble guanylate cyclase, and heat shock protein 90. Research involves the use of DNA, protein biochemistry, and whole animal techniques. Excellent opportunity for a candidate (regardless of background) who wishes to receive in-depth training in one or more of these techniques. Send curriculum vitae and names of three references to:

Dr. John D. Catravas
Regents Professor and Director
Vascular Biology Center
Medical College of Georgia
Augusta, GA 30912
E-mail: jcatrava@mail.mcgc.edu

CAREER IN OPTOMETRY, OPTOMETRIC RESEARCH, OR TEACHING

The New England College of Optometry offers a unique program for those with a Doctorate in the sciences: biology, chemistry, physics, psychology, etc. Candidates have the opportunity to obtain the Doctor of Optometry (O.D.) degree in 27 months. The Program begins annually in March. Employment opportunities exist in clinical practice, industry, optometric faculty positions, and research. Contact: Admissions Office, Department S, 424 Beacon Street, Boston, MA 02115. Telephone: 1-800-824-5526; e-mail: admisso@ne-optometry.edu; website: <http://www.ne-optometry.edu>. Application deadline: February 1, 2003.

POSTDOCTORAL FELLOW POSITION available in the Carl C. Icahn Institute for Gene Therapy and Molecular Medicine at Mount Sinai School of Medicine to investigate molecular mechanisms of stem cell development and leukemia focusing on novel cytokine signal transduction pathways using various approaches including knockout animal models. Candidate must have an M.D. or a Ph.D. education and be skilled in molecular and cellular biology. Experience in animal models is highly desirable. Candidates should submit updated curriculum vitae and names of three references to: Dr. Saghi Ghaffari, One Gustave L. Levy Place, Box 1496, New York, NY 10029. E-mail: saghi.ghaffari@mssm.edu; FAX: 212-849-2437.

WORKSHOPS

BIOINFORMATICS TOOLS FOR COMPARATIVE GENOMICS

November 4-8, 2002

University of California
Berkeley/LBNL/NHLBI

For postdoctoral, medical, and especially cardiovascular Researchers wishing to apply bioinformatics tools in their research. Techniques include database searches, annotation, SNPs, microarray analysis, VISTA, and more. No tuition. See website: <http://pga.lbl.gov/workshop>; e-mail: pgaworkshop@lbl.gov or call Telephone: 510-486-4162. Apply before September 22, 2002.

CUSTOM MICROARRAYS

RELIABLE FAST ACCURATE

MICROARRAYS, INC.
(615) 327-5495
www.microarrays.com



DNA Sequencing Services

- Proven, high quality sequencing results
- Fast turnaround times
- Flexible services tailored to meet different project requirements
- >99.99% accuracy for publication-ready results
- Comprehensive support



Europe: +49-2103-29-12400
North America: 800-426-8157
www.qiagenomics.com

DNA PEPTIDES

Free Set-up and Desalting Call and Compare

Gene Synthesis, Site Mutagenesis, Protein Expression and more

COMPARE AND SAVE

DNA Sequencing: as low as \$15 per run

Custom Anti-peptide Antibody
(including peptide synthesis)

\$850

GENEMED SYNTHESIS

800.344.5337 Fax: 650.952.9540
Web Site: www.genemedsyn.com

Transform Your Research with IDT's FRET Probes!

Molecular Beacons, Dual-Labeled Fluorescent Probes, Dark Quenchers, and Many Reporter Dyes Available.



www.idtdna.com
1-800-328-2661

Custom Peptides & Antibodies

Best Service & Price! Compare and Save!

Alpha Diagnostic (800) 786-5777

Fax (210) 561-9544; info@4adi.com
Web site: http://www.4adi.com

First Cytokine Protein Array

Protein Array

Detect 42 Cytokine Simultaneously

Affordable / Reliable / High Sensitivity / Any Lab Setting

RayBiotech, Inc.
www.raybiotech.com
1-888-494-8555

Quality Peptides & Antisera

Friendly, Personal Service
www.genosys.com

Custom Peptide Synthesis

- sequence analysis
- IG, >70%, >80%, >95% purity
 - scales from 2 mg-1 g
- synthesis up to 120 residues
- variety of modifications available
- mass spec & HPLC on every peptide
- satisfaction guaranteed

Polyclonal Antisera Service

- antigen design assistance
- synthesis, conjugation and sera collection
- rabbits, chickens, sheep & goats available
- flexible protocol
- phospho-specific antibody production

SIGMA
GENOSYS

North America 1-888-863-3693
ginformation@sial.com

Europe (+44) (0) 1223 839000
info@sigma-genosys.co.uk

rtQ-PCR FRET PROBES

- Black Hole Quencher™ dyes
- 3', 5' or internal modifications
- Top Quality • Best Pricing • Great Support



BIOSEARCH
TECHNOLOGIES
Chemistry for Genomics™

1.415.883.8400
www.biosearchtech.com

Widely
Recognized
Original &
Guaranteed

KlenTaq1

8¢/u
Truncated
Taq DNA
Polymerase
Withstand 99°C

US Pat # 5,436,149
Call: **Ab Peptides** 1-800-383-3362
Fax: 314-968-8988 www.abpeps.com

Bio•Synthesis, Inc. 1-800-227-0627

Quality Custom Synthesis

- Peptides
- Organic Synthesis
- Antibodies
- DNA
- Bioconjugates
- Molecular Beacons

www.biosyn.com

sales@biosyn.com

3 O.D. Select Oligos

NEW LOW PRICE

Just \$0.45/base*

We'll ship your 3 O.D. Select oligos in just 24-48 hours. Every oligo is QC'd by PAGE analysis, and each batch is performance-tested by mass spec.

Order by fax: 281-363-2212, email: gorderentry@sial.com or web: www.genosys.com.

*Desalted only. Oligos must be 10 to 35 bases in length. No modifications or additional purification. Offer valid in U.S. only.

SIGMA
GENOSYS

North America: 1-877-710-1504 • email: ginformation@sial.com

CUSTOM PEPTIDES

QUICK QUOTE

MOST QUOTES IN AN HOUR

FAST DELIVERY

2 WEEKS FOR MOST ORDERS

100% SATISFACTION GUARANTEED

...MADE EASY!

NEW ENGLAND
PEPTIDE, INC.
Tel: 888-343-5974

Fax: 978-343-5940 www.newenglandpeptide.com

Mutagenesis

High Throughput

www.irisgenetics.com

phone (713) 682-5825

IRIS

Custom Peptides & Antibodies

- Experts in Antigen Design
- Phosphopeptides
- Phosphospecific Antibodies

1 800 435 2080

e-mail: peptide@biosource.com





I WISH WE'D GONE TO THAT A.A.A.S. SYMPOSIUM
ON INTERSTELLAR TRAVEL!

Don't miss this year's AAAS Annual Meeting!

13–18 February 2003 ▶ Denver, CO ▶ For full details: www.aaasmeeting.org



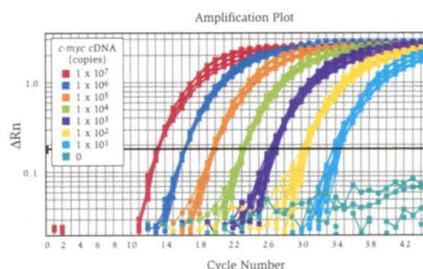
Want an alternative to probes?

LUX™ Fluorogenic Primers offer sensitive, specific real-time PCR detection at about half the cost.

Examine your options for real-time PCR detection. You could use dual-labeled probes, but they're expensive. You could use DNA binding dyes, but you'll get non-specific detection. Why compromise? LUX™ Fluorogenic Primers provide the high performance of dual-labeled probes at about half the cost.

No probes. With the Light Upon eXtension (LUX™) effect, you only need two primers—one with a single fluorogenic label, the other without—for accurate real-time detection. No probes. No quenchers. No wasted money.

Real-time PCR of *c-myc* cDNA using 200 nM FAM-labeled LUX™ Primer



Hand over great results. Detect 100 or fewer copies of target genes (figure). Achieve a dynamic range of 7 orders in magnitude. Perform melting curve analysis. And use different labels for multiplexing. With LUX™ Primers, you can do it all.

The perfect fit. Choose the smart alternative for real-time detection. Try LUX™ Primers and see how they compare to your dual-labeled probe. Visit www.invitrogen.com/lux today.



Corporate Headquarters:
Invitrogen Corporation
1600 Faraday Avenue
Carlsbad, California 92008 U.S.A.
Tel: 1 760 603 7200
Tel (Toll Free): 1 800 955 6288
Fax: 1 760 603 7229
Email: tech_service@invitrogen.com

European Headquarters:
Invitrogen Ltd
Inchinnan Business Park
3 Fountain Drive
Paisley PA4 9RF, UK
Tel: +44 (0) 141 814 6100
Fax: +44 (0) 141 814 6260
Email: eurotech@invitrogen.com

For an office near you go to:
www.invitrogen.com