

NEW PRODUCTS

GENE EXPRESSION MICROARRAY

Each high-density Rat GEM 2 microarray contains more than 8400 genes known to be active in the rat central nervous system, as well as genes believed to be important in rat neuronal functions. The array is designed to provide a means to quickly perform highly parallel expression studies of rat model systems. Researchers can use the thousands of data points resulting from each Rat GEM 2 experiment to perform detailed, computer-based studies of human neurological disorders commonly modeled in laboratory rat studies, such as depression, Parkinson's disease, and Alzheimer's disease. Researchers can use this microarray to discover novel functions of neuron-associated genes within and outside the rat central nervous system; compare gene expression in normal, diseased, treated, and untreated tissues; iden-

Incyte Pharmaceuticals
For more information call 650-855-0555 or **circle 148** on the Reader Service Card

tify promising neuroactive drug targets; assess how a drug may affect the central nervous system; and more.

EVAPORATOR STATION

The 96-well Microplate Blow-Down Evaporator Station evaporates solvents in minutes rather than hours. The new system removes the traditional bottleneck of solvent evaporation from a 96-well microplate prior to analysis or reconstitution in buffer. The evaporator injects heated nitrogen into the 96 wells of the microplate simultaneously. It accommodates both deep and shallow 96-well microplates. The height of the dryer is fully adjustable, allowing the head to be lowered as solvents evaporate, producing faster "dry down" times. The evaporator is supplied with straight needles as standard; there is the option of a unique curved needle, which produces a

Porvair Sciences
For more information call +44 (0) 1932 240255 or **circle 149** on the Reader Service Card

vortex as the gas is released. This option is useful if the fastest concentration time is critical or if the unit has to be used unheated, as is the case with some volatile or thermally unstable compounds.

LITERATURE

Cannon Glass Capillary Viscometers contains photographs and detailed descriptions of more than 20 different types of viscometers. An introductory article explains the field use for each type.

Cannon Instrument
For more information call 800-676-6232 or **circle 150** on the Reader Service Card

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



The Center for Theology and the Natural Sciences

Science & Religion

COURSE PROGRAM

*Up to 100 awards of \$10,000 each
Introductory and Advanced Workshops*

The 2000 program will grant up to 100 awards of \$10,000 each for outstanding college courses in science and religion, and supports a series of underwritten workshops on science and religion, course development and pedagogy. The preliminary application deadline is **December 1, 1999**. Introductory and advanced workshops will be held in January, June, and July of 2000. *For more information or application/registration materials, visit www.ctns.org or contact CTNS at: 2380 Ellsworth St. Berkeley, CA 94704 • 510.665.8141 • Fax: 510.665.1589 E-mail: SRcourse@ctns.org*

Funded by the

JOHN TEMPLETON FOUNDATION

Circle No. 69 on Readers' Service Card

Buy DIRECT from the Manufacturer and SAVE

• X-Gal	• IPTG
(Catalog No. 1758-0300)	(Catalog No. 1758-1400)
1-4 g \$55/g	1-4 g \$15/g
5-9 g \$45/g	5-9 g \$11/g
10-24 g \$39/g	10-24 g \$10/g




• X-Glucuronide, Na Salt
(Catalog No. 1758-0700)
0.5 g \$235 1.0 g \$370

• X-Glucuronide, CHA Salt
(Catalog No. 1758-0600)
0.5 g \$235 1.0 g \$370

• For immediate service or a complete product listing, call:

1-800-709-6776

• Discounts on bulk and semi-bulk quantities.

We accept:   

Inalco Pharmaceuticals
780 Caudill Street, Suite A
San Luis Obispo, CA 93401
Tel: 805-782-0718 • Fax: 805-782-0719
E-mail: 102024.1763@compuserve.com

Circle No. 55 on Readers' Service Card

Classified Advertising

To obtain information on rates, deadlines, editorial features, and bonus distribution schedules, call our sales office or visit *Science Careers* at www.scienceonline.org and click on "How to Advertise." All advertising is subject to publisher's approval.

UNITED STATES

Display Classified Advertising

Bren Peters Kristin Westapher
Tel: 202-326-6541 Tel: 202-326-6555
Fax: 202-289-6742
E-mail: science_displayads@aaas.org

Line Classified Advertising

Troy Benitez Kathleen Clark
Tel: 202-326-6740 Tel: 202-326-6722
Fax: 202-289-6742
E-mail: science_classifieds@aaas.org

Line ads are not agency commissionable. Ads submitted should not include any bold, italicized, or abbreviated words. *Science* will edit and typeset ads according to *Science* style requirements. *Science* cannot provide proofs of typeset line ads. *Science* will provide an estimated cost of line ads at time of placement. This is an approximate cost only. Please provide contact name, telephone, billing information, and purchase order numbers with your order.

Online Classified Advertising

Beth Dwyer
Tel: 202-326-6534
Fax: 202-289-6742
E-mail: bdwyer@aaas.org

Every employment ad placed in *Science* will be featured in our job database online for 4 weeks. Call to find out how to link to thousands of additional job seekers online with *Science Professional Network*.

www.scienceonline.org

Ad Materials: Send to: *Science Classified Advertising*, 1200 New York Avenue, NW, Room 911, Washington, DC 20005

EUROPE

Line, Display, and Online Classified Advertising

Deborah Cummings
Tel: +44 (0) 1223 326 500
Fax: +44 (0) 1223 326 532
E-mail: european_ads@science-int.co.uk

Ad Materials: Send to: Advertising Dept., Bateman House, 82-88 Hills Road, Cambridge CB2 1 LQ, United Kingdom

Discounts: A 3% cash discount is granted to all prepaid ads.

Credit Cards: *Science* accepts American Express, MasterCard, and VISA. Discount does not apply to credit cards.

Cancellations: Deadline for cancellation is Tuesday, 10 days prior to issue date.

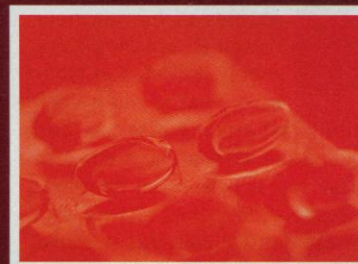
To **Subscribe** to *Science* call:
202-326-6417 or 1-800-731-4939

ADVERTISER DIRECTORY



East Coast Careers

in Biotechnology & Pharmaceuticals



The following organizations have placed advertisements in the **East Coast Careers** Advertising Supplement.

Biogen, Inc.	430
Genentech, Inc.	441
Genzyme Corporation	439
Johnson & Johnson	436
Maxygen	437
Millennium Pharmaceuticals, Inc.	431
Mount Sinai	434
Novartis Agribusiness	435
Protein Delivery Inc.	433
Schering-Plough Research Institute	440
SmithKline Beecham Pharmaceuticals	428-429

East Coast Careers in Biotechnology and Pharmaceuticals

Eastern Promise

Life science companies on the East Coast participate in clusters that contain the best and brightest scientists. And they can deal more conveniently with the federal government than rivals in other locations.

BY PETER GWYNNE

However you look at it, the East Coast plays a major role in U.S. life science. Just last year, four eastern states received, among them, more than a third of the \$11.2 billion awarded nationwide by the National Institutes of Health (NIH): Massachusetts received 11 percent of the total, trailing only the 15 percent that went to California. New York, Pennsylvania, and Maryland occupied the next three places in the NIH league table, with 10, 7, and 6 percent of the grant money, respectively.

In addition, the East Coast contains four of the eight main U.S. clusters of pharmaceutical and biotechnological corporations: the Boston-Cambridge region, otherwise known as Genetown; the swath of states nicknamed Pharm Country, which contains Connecticut, New York, New Jersey, and Pennsylvania; BioCapital, the location that includes Washington, D.C. and its Maryland and Virginia suburbs; and the part of North Carolina centered on Research Triangle, for which the cluster is named.

Boosters of life science in the four regions refuse to accept the status quo. Not only do they continue to work hard to encourage new start-up companies — and biotechnology firms in particular — through tax credits, promotional events, and other methods; they are also preparing to attract new business from major pharmaceutical corporations that seek fresh locations for their research and manufacturing arms.

In recent years, the large pharmas have recognized that the next generation of medicinal drugs will stem from work now under way in research laboratories. A new report titled "The Economic Impact of the Pharmaceutical Industry in Massachusetts," prepared by University of Massachusetts assistant management professor Anurag Sharma and funded by the Pharmaceutical Research and Manufacturers of American trade group, outlines the situation. The role that biopharma clusters will play in the pharmaceutical industry of the next millennium, states the report, "will be driven by the strength of research in its universities and institutions and by the ability of the general economic infrastructure to support investments."

The report targets the Bay State. However, its conclusion applies to other clusters of the life science industry. It's no wonder, then, that all four East Coast cluster regions are emphasizing their foundation of basic research facilities as they try to land new pharmaceutical facilities.



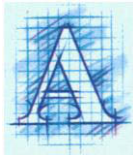
Wyeth-Ayerst
Laboratories

Emisphere
Technologies, Inc.

Genzyme
Corporation



Every day, we defy the odds.



At SmithKline Beecham we offer some of the world's most gifted minds the opportunity to challenge their talents and ideas. Extend your capabilities as you become an integral part of our impressive global achievements. Our scientists work in cross-functional teams that encourage and support breakthrough ideas and developments. And as a transnational leader in healthcare, SmithKline Beecham is committed to our local and global communities by actively supporting neighborhoods and villages with medicines and vaccines. We have opportunities available at our state-of-the-art, suburban Philadelphia, PA facilities.



Anti-Infectives Research/Microbiology

Associate Scientist/Scientist

You will develop and run assays to evaluate novel antibacterial targets; perform basic molecular biology and purification of bacterial protein targets using protein biochemistry techniques; and design and run assays for high-throughput screening and inhibitor evaluation. Good team work and computer skills including the use of Microsoft Word, Excel and PowerPoint are also required. You should have a BS or MS in Microbiology or Biochemistry and should possess practical experience (from an academic or industrial setting) in molecular microbiology, protein purification and biochemistry, and running enzyme assays. The ability and experience in proper handling, recording, and analyzing scientific experimental data is desired, along with solid computer and communications skills. (Ad Code: 991047A)

Associate Scientist/Scientist

You will help to develop molecular genetic systems in Gram positive bacteria; evaluate antimicrobial targets; and perform molecular biology experiments such as cloning, vector construction and mutagenesis. You will also be responsible for characterizing bacterial target proteins using protein biochemistry techniques such as SDS-PAGE, Western blotting and data analysis using appropriate software. You should have a BS or MS in Microbiology, Biochemistry or Molecular Biology. Practical experience in the above mentioned techniques is essential. Knowledge and experience in gene regulation in bacteria are preferred. The ability in proper handling, recording, and analyzing scientific experimental data is required, along with good computer and communications skills. (Ad Code: 991030A)

Associate Scientist/Scientist

You will evaluate antibacterial targets in *Helicobacter pylori* using molecular microbiology methods and develop assays for bacterial targets. You will also perform transformation and microscopy of *H. pylori* cultures; use molecular biology techniques to perform mutagenesis and gene expression analyses; and express and purify target enzymes. You must possess a good practical and theoretical understanding of Biochemistry, Molecular Biology or Microbiology equivalent to a BS degree. You must also have experience in one or more of the following: microbiology techniques, particularly with pathogenic organisms; molecular biology including cloning and PCR; protein biochemistry and basic enzyme methods. Good team working, communication and computer skills are also desirable. (Ad Code: 981175A)

Genomics

Within this cutting edge environment, the transnational Biotechnology and Genetics division provides several molecular, cellular and genetic platform technologies to supply reagents for SB's drug discovery and development pipeline. Three new opportunities have arisen for highly motivated individuals wishing to have a career in the pharmaceutical industry.

Genetic Technologies

The Department of Genetic Technologies has responsibility for providing the platform technologies to support the R&D pipeline in genomics, including high-throughput genome analysis and DNA sequencing. The department is also working on the implementation of pharmacogenetics for drug discovery and development. An opportunity is available for:

PhD Scientist-DNA Sequencing and Mutation Detection

You will be responsible for providing expertise in DNA sequencing and mutation detection for the Genetic Technologies group. You will supervise an already established team providing core support in DNA sequencing and oligonucleotide synthesis. You will work with the Genetic Technologies group in Harlow UK to extend our capabilities in mutation detection and genotyping as tools to evaluate the role of variation in microbial and mammalian genes. We require a highly motivated individual with a PhD in Mammalian Genetics and 1-3 years of experience. Experience in the use of bioinformatics and databases in genetics and a good working knowledge of DNA sequencing and assembly programs is also required. (Ad Code: 991070B)

Molecular Biology

The Department of Molecular Biology has responsibility for providing platform technologies to support R&D in the areas of cDNA and genomic cloning, as well as high-throughput gene expression profiling by microarrays. Two opportunities have arisen in the Microarray Group:

PhD Scientist-DNA Microarrays

You will be responsible for conducting microarray studies in gene expression analysis for target identification and target validation in a range of animal and microbial systems. In addition, you will be responsible for introducing improvements to our microarray and other high-throughput expression analysis platforms. The position will involve work in the manufacture and processing of microarrays, as well as data analysis. Other responsibilities will include offering critical expertise to experimental design and data validation. Responsibilities may also

include managing a laboratory and supervising one or more lab scientists. A PhD in Molecular Biology, Biology, Genetics, or Biochemistry and a minimum of 2 years of post-doctoral experience is required. Experience in fluorescent labeling, hybridization kinetics and robotics is highly desirable. Experience with microarrays and relevant engineering or computer technologies with some computer programming skills is a plus. (Ad Code: 991211B)

Scientist-Molecular Biology/ DNA Microarrays

You will be responsible for the cloning and preparation of DNA targets for placement on microarrays. Additional responsibilities will include the manufacture of microarrays, RNA production, probe generation, hybridization, and analysis of microarray data. A Bachelor's degree with 3-5 years of relevant experience or a Master's degree with 1-3 years experience is required. Proven experience in standard RNA/DNA methodologies including recombinant DNA techniques, PCR, and a working knowledge of state-of-the art cDNA and genomic cloning methodologies is also required. Experience with computers and robotics systems is a plus as well as prior experience with microarrays. (Ad Code: 991210B)

Oncology Research

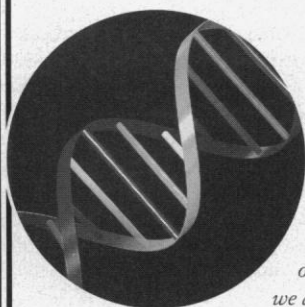
Investigator/Senior Investigator

You will be responsible for initiating and conducting experiments to support oncology drug target validation, and serving as a key contributor to research teams relevant to Oncology. You will also initiate and conduct experiments to verify mechanisms of lead compounds. We require a theoretical and practical knowledge equivalent to a PhD in Pharmacology, Biochemistry, Molecular Biology or related field with at least 2 years of post-doctoral training or work experience in Molecular Oncology. Research experience in pharmaceutical industry drug discovery is preferred. Demonstrated skills in techniques of cell biology, molecular biology and biochemistry, and knowledge of cell cycle regulation, signal transduction, and apoptosis are also necessary. (Ad Code: 991145B)

SmithKline Beecham is dedicated to an innovative workplace and supports you with career long opportunities and learning. We offer a competitive benefits and compensation package. To be considered for these suburban Philadelphia, PA opportunities, please forward your scannable resume to: SmithKline Beecham, c/o National Resume Processing, (Ad Code), P.O. Box 1070, Burlington, MA 01803. Indicating Ad Code is essential. For a full listing of current opportunities, or to submit a resume online, visit our website at www.sb.com/careers

SB
SmithKline Beecham
Pharmaceuticals

Realize Your Potential



DEFINING SUCCESS *in* BIOTECHNOLOGY

Biogen, Inc., winner of the 1998 National Medal of Technology®, has established a unique record of success as one of the world's premier biopharmaceutical companies. Pioneering research by our scientists has led to the introduction of several important new medical therapies, including AVONEX® (Interferon beta-1a), the most prescribed therapy in the U.S. for relapsing forms of multiple sclerosis. We are staking our future growth on the development of our next generation of pharmaceutical products, five of which are currently being tested in human clinical trials. Today, we are seeking the following committed professionals to join our expanding team in Cambridge, MA.

MEDICAL SCIENCE LIAISON

Capitalizing on your knowledge of the medical industry, you will develop and manage Phase IV studies to be conducted with major multiple sclerosis (MS) treatment centers. Your work will include supporting analysis and publication of studies, establishing educational and speaker programs, and participating in presentations. We will rely on you to maintain vital relationships with key opinion leaders in the MS neurologist community. To qualify, you must possess graduate-level training in science and/or medicine (PhD, PharmD, DVM), 5+ years experience in professional relations or the medical marketing/affairs industry, and an understanding of Clinical Research/Good Clinical Practice and FDA regulations for sponsored research. A background in Neurology and/or Immunology is preferred. A team player with excellent written and verbal communication skills and proven ability to work independently is ideal for this position. Requires 75% travel. Source Code: SM-MSL

TECHNICAL SPECIALIST HTS SYSTEMS

Interacting with researchers working in a high throughput screening environment, you will gather and translate requirements to meet system needs, implement hardware/software systems aligned with the HTS process, optimize the HTS system and provide a continuous improvement strategy. You must possess a BS/BA, laboratory-based scientific experience, a solid understanding of both biochemistry and information systems, familiarity with laboratory processes and resulting data, and a background in systems development. Systems implementation experience and exposure to a variety of scientific applications (RS3, CSAP) and system architectures (TCP/IP, UNIX, Oracle) are also needed. A desire to assume increasing Oracle database administration responsibilities is helpful. Effective communications skills and the ability to work in a dynamic, interactive environment where prototyping or RAD techniques may be utilized are essential. Source Code: SM-HTS

SCIENTIST, IMMUNOLOGY

A PhD-level Scientist with 2+ years of postdoctoral training, possessing exceptional immunology skills, is needed to study the biology of various members of the TNF family. Additional skills include *in vivo* physiological analyses of rodents, histology, cellular immunology and genetic manipulation of mice. Source Code: RC-JB

INSTRUMENTATION TECHNICAL SPECIALIST

You will provide overall support to the Biogen instrumentation user community with a specific focus on the computer (PC/Mac) integration with instruments. This position will divide time between Research, QA/QC, and PD and will have overall technical responsibility for the desktop computing environment related to instrumentation. This position will also lead and assist Business Analysts in the research and testing/implementation of new technologies to meet Biogen's evolving instrumentation requirements. Requires a BSCS or related degree with 3-5 years hands-on experience integrating computers and instrumentation. Extensive software and hardware troubleshooting experience, expertise in the networking of various instruments (i.e. plate readers, HPLC, microscopes, etc.) with both Mac and PC computers, and advanced knowledge of the following hardware and operating systems is also required: Mac O/S 7.X, 8.X; Novell NetWare 4.X, PC Windows NT Workstation and Windows '95. Exceptional customer service orientation, ability to meet deadlines, and excellent communication, problem solving, and organizational skills are essential. Source Code: SM-ITS

MANAGER, RESEARCH COMPUTING

You will develop, implement and maintain Biogen's bioinformatics, cheminformatics and overall research computing capability and provide both short- and long-term IS strategies to help meet our organization's business objectives. Specific responsibilities include: creating an informatics database strategy; developing and maintaining applications systems to manage/analyze client genomic and instrumentation data; developing novel informatics tools; and building and managing a staff of IS professionals. Requires a PhD (Biology or Chemistry preferred), several years of hands-on experience in a research environment and a demonstrated record of successful management of people and projects. The ability to work effectively across functional lines is essential. Expertise in C/C++, Java and PERL in a UNIX environment, as well as knowledge of component-based interfaces such as CORBA a plus. Source Code: SM-MRC

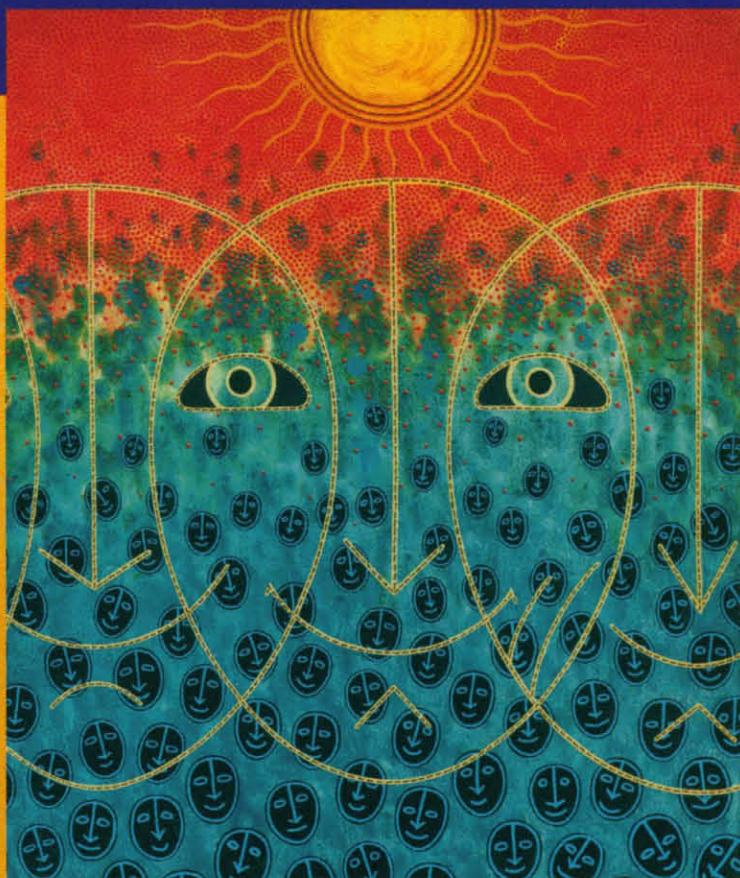
Biogen has an outstanding record of leadership and accomplishment in the biotechnology field. We have one of the strongest financial profiles in the industry, and our compensation and benefits package, including equity participation, is unmatched. We've created an environment designed to attract and retain the world's most accomplished talent, and we invite you to forward your resume to: Biogen, Inc., Attn: Human Resources, Source Code: __, 14 Cambridge Center, Cambridge, MA 02142; Fax: (617) 679-2546; Email: resumes@biogen.com (please include Source Code in the subject line). Biogen is an Equal Opportunity Employer. No phone calls, please.

BIODGEN®

DELIVERING ON THE PROMISE OF BIOTECHNOLOGY®

www.biogen.com

the new face IN P H A R M A C E U T I C A L S



Millennium has a new vision for the future of medicine. That drug development be perfectly precise. That all patient therapies be totally individualized. That all disease be targeted at its core. We will succeed in realizing this vision for eight hundred reasons—our people. Expertise, insight, synergy, and above all, passion unites us in creating a better way to cure disease and allows us to have fun while doing it. The face of the future never looked brighter.

Join us in building the biopharmaceutical company of the future. Send your resume to: Millennium Pharmaceuticals, Resume Processing Center, Source Code SC799, PO Box 798, Burlington, MA 01803. Email: millennium@webhire.com. Fax: 1-800-370-6925. A Source Code must be included with all submissions. We are an equal opportunity employer committed to discovering the individual in everyone.

SR. SCIENTISTS

Medicinal Chemistry

Antibody Group

SCIENTISTS

Osteoporosis

Liver Fibrosis

Pathology

**Immunology/
Inflammation**

**Database &
Datamining**

Protein Sequencing

Patent Analyst

ASSOCIATE DIRECTORS

Assay Development

Hit to Lead

Medicinal Chemistry

**Computational
Chemistry**

INFORMATION TECHNOLOGY

**Principal Software
Engineer/Architect**

**Sr Software Engineer—
Informatics**

www.mlnm.com



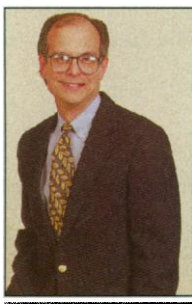
MILLENNIUM®

Transcending the limits of medicine™

Those four regions, and the East Coast in general, have plenty to offer potential employers and their employees. Here, representatives from companies in the states of Pennsylvania, New York, and Massachusetts detail the advantages of the East Coast in general, and their own locations in particular, in helping them to attract top-notch scientists and to fulfill their missions. Those advantages include proximity to federal government grant agencies and regulators, the existence of biopharma clusters containing critical masses of academic and corporate members, and a strong cultural ambience.

RADNOR. PENNSYLVANIA

"For companies, one of the biggest reasons why the East Coast is popular is proximity to Washington," says Joseph Camardo, senior vice president for Radnor-based clinical research programs at Wyeth-Ayerst Laboratories. "That may seem trivial, until you have to get in a plane for a two-hour meeting in Washington." Camardo and his colleagues drive to the nation's capital.



Joseph Camardo

Managers and scientists who work for Wyeth-Ayerst, a division of American Home Products, have plenty of reasons to visit Washington. "We are doing clinical research in women's health care," explains Camardo. "We have a neuroscience group. We have products in clinical development for depression, schizophrenia, and epilepsy. We have a new product for insomnia. Our inflammation division is working on a drug for arthritis. Our immunology group is developing products for transplantation. Our metabolic group is completing work on proton pump inhibitors. And our cardiovascular group has products for heart failure and coronary artery disease." That activity by the 500 individuals in the clinical research programs at Radnor, the Cambridge, Massachusetts, site of the Genetics Institute protein therapeutics group, and Pearl River, New York, where the vaccine development group is located, provides grist for plenty of visits to Food and Drug Administration (FDA) regulators.

Wyeth-Ayerst's wide spectrum of research benefits from another facet of life in the Eastern time zone. The typical working day in that time zone overlaps with the business day in Europe. That's valuable to Wyeth-Ayerst, because it has research locations in Europe, and undertakes collaborative projects with European firms. "It's important to be able to talk to people," says Camardo.

The location also works well for recruiters. "We hire from a lot of the local colleges and universities in the area. We're within a stone's throw of a couple of dozen major colleges and universities. You can go just out the door here and find four medical schools," says Camardo. "We're looking for

doctors who have been on staff and want to go into business. We also want good graduate students in neurobiology, infectious diseases, and cell biology."

Wyeth-Ayerst's location in a biopharma cluster provides other hiring opportunities. Life scientists who leave their jobs through choice or corporate changes can find new positions without having to move house. "Local companies are often sources of people for us," continues Camardo. "In a way, the industry benefits from having this kind of cluster. It's useful to be able to move to a local company if you've gone into the industry but find you're not suited to the particular company."

What does the Philadelphia area have to offer recruits? "This is a very livable place," says Camardo. "We have reasonably priced housing, and good schools and recreation. Most people who have moved here have found a comfortable way to live."

TARRYTOWN. NEW YORK

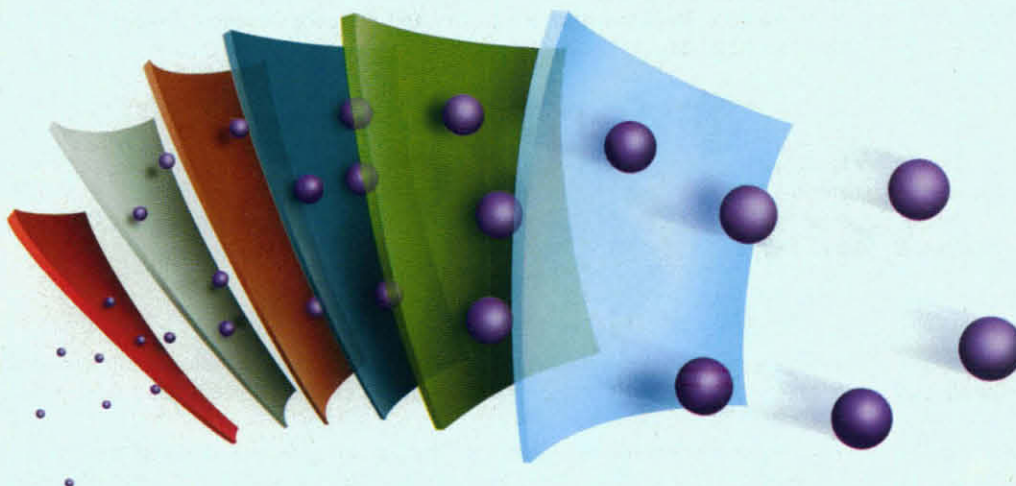
Emisphere Technologies, Inc. aims to discover and apply synthetic compounds that will enable the oral delivery of medications that can't currently be given by mouth, such as macromolecules and small charged or polar organics. "It's an intriguing technology that is coming close to commercialization," says Steven Dinh, Emisphere's vice president of research. "Our first product, an oral form of heparin, is entering phase III clinical trials this summer. We expect that it will take about 21 months to get regulatory approval."

Emisphere's location, north of New York City, ensures a steady stream of applicants for scientific jobs with the company. "We're very nicely situated in the Northeast corridor, where we can draw from academia as well as the companies around here," says Dinh. "We are very close to leading academic institutions, as well as leading biomedical institutes such as Rockefeller University."



Steven Dinh

Join the Next Generation of Drug Delivery Innovation



Be a part of the pioneering innovations from Protein Delivery, Inc.

Located in Research Triangle Park, NC, a vibrant center of bioscience research and development, Protein Delivery uses polymer-based medicinal chemistry to enable the oral delivery of protein and small molecule drugs and the delivery of drugs across the blood brain barrier.

Protein Delivery has an oral insulin product for diabetes in Phase II clinical studies, oral calcitonin hormone for osteoporosis in late preclinical studies, and many promising products in preclinical development.

Employment opportunities are available for:

Analytical Research Science Bioanalytical Chemistry
Synthetic Chemistry Pharmacology

PROTEIN  DELIVERY

Learn more about our company and opportunities in drug delivery innovation at www.proteindelivery.com.

Or send your resume to: Protein Delivery, Inc., Human Resources, P.O. Box 13940, RTP, NC 27709-3940.

Fax: (919) 474-9407 Email: hr@proteindelivery.com

EOE M/F/D/V

Post-Doctoral Opportunities

Mount Sinai School of Medicine is a leader in medical research and education. We have the following opportunities for experienced research professionals:

**Mount
Sinai**®

Function and Metabolism of Presenilins and APP

A position is available to study the expression, function and metabolism of Presenilins and APP in transgenic mice and neuronal cell lines (APP and Presenilins play an important role in Alzheimer's neurodegeneration). Experience in molecular biology and/or biochemistry is required. Reply with C.V. and names of three references to: **Dr. N. K. Robakis, Department of Psychiatry and Fishberg Research Center for Neurobiology, Box 1229; Fax: 212-831-1947; E-mail: robakis@smtpink.mssm.edu**

HIV-1 Pathogenesis

A position is available immediately working under the direction of Dr. Mary Klotman, Chief, Division of Infectious Diseases. This position will involve the study of the molecular basis of HIV-1 pathogenesis. Candidates with a Ph.D., M.D. or M.D./Ph.D. and experience in molecular or cellular biology are encouraged to apply. Reply with C.V. to: **Mary Klotman, M.D., Chief, Division of Infectious Diseases, Box 1090; Fax: 212-534-3240; E-mail: mklotma@smtpink.mssm.edu**

Cell or Molecular Biologist

Our Division of Environmental Medicine is developing novel *in vitro* approaches to study cerebral vasculature and its blood-brain barrier properties. The objective is to create a cell-culture model to assess the transport of exogenous substances into the brain.

Our ideal candidate has a high proficiency in sophisticated cell-culture and molecular biology techniques, is able to work independently in the laboratory and is creative in designing new methodology. He/she also must be able to work well in a group environment. Reply with C.V. and the names and phone numbers of three references to: **Luz Claudio, Ph.D., Division of Environmental Medicine, Box 1057; Fax: 212-996-0407; E-mail: Luz.Claudio@mssm.edu**

Alzheimer's Disease

A position is available to study the molecular mechanisms of caspase activation in mechanisms of apoptotic neuro death in Alzheimer's Disease using mouse models, cell cultures and biochemical assays. The successful candidate must have a demonstrated knowledge of protein chemistry and molecular biology. This position requires a 2+ years commitment and exceptional motivation. Reply with C.V., research interests and the names of three references to: **Giulio Maria Pasinetti, M.D., Ph.D., Director, Neuroinflammation Research Center, Department of Psychiatry, Box 1229; E-mail: gp2@doc.mssm.edu**

Myocardial Biology

Positions are available to study mechanisms of cardiovascular function and disease. Our group uses a multi-disciplinary approach and makes extensive use of traditional and conditional transgenic and gene-targeted mouse systems. Current projects include: (1) connexin43 gene expression, function, gap junctional remodeling and arrhythmogenesis; (2) the role of sorcin in the regulation of cardiac excitation-contraction coupling; (3) development of novel conditional transgenic and gene-targeting models; (4) specification of the cardiac conduction system. Pertinent papers: PNAS 95 (19):11371, 1998; J Biol Chem. 273 (30):18930, 1998; Circ Res. 82 (8):837, 1998; Nat Biotech. 17 (2):165, 1999. Reply with cover letter and C.V. to: **Glenn I. Fishman, M.D., Director, Section of Myocardial Biology, Box 1269; Fax: 212-828-4178; E-mail: fishmg01@doc.mssm.edu**

Thyroid Hormone Receptor Function

A position is available to investigate the molecular and physiological functions of thyroid hormone receptors, using knockout mouse models [Nat. Genet. 13: 354 (1996); PNAS 95: 15758 (1998); Genes & Devel. 13: 1329 (1999)]. Present studies focus on the endocrine system, developing nervous system and auditory system. Experience with molecular biology and/or transgenic mice required. Reply with C.V. and three letters of reference to: **Dr. Douglas Forrest, Department of Human Genetics, Box 1498; Fax: 212-849-2508.**

We offer an excellent salary and a comprehensive benefits package. For consideration, follow "Reply to" information for position of interest, to: **Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** Visit our website at: **www.careermosaic.com/mountsinai** We are an equal opportunity employer fostering diversity in the workplace.

Mount Sinai School of Medicine



NOVARTIS
Novartis Agribusiness
Biotechnology Research, Inc.

Creating opportunities...

Novartis is a world leader in life sciences with prominent positions in Crop Protection, Seeds, and Animal Health. Our mission is to make discoveries that enable the creation of novel seeds, new methods of protecting crops, and new animal health products that enhance human life in an environmentally sustainable manner. Construction is underway on the new research building and greenhouses at Novartis Agribusiness Biotechnology Research, located in Research Triangle Park, North Carolina. This \$20 million investment emphasizes Novartis' commitment to biotechnology, and will provide the tools to further develop our on-going efforts as well as allow us to grow into new and exciting areas for Novartis Agribusiness.

GRAIN TRAITS DISCOVERY GROUP POST-DOCTORAL POSITIONS

This group is developing transgenic solutions for improving the composition and quality of major grain crops. Efforts are centered on traits that are associated with grain processing characteristics, carbohydrate, protein, and oil quantity and quality, and food/feed nutritional value. The successful candidates will join an interdisciplinary group of highly motivated scientists devoted to maintaining leadership in the area of agricultural biotechnology. The Grain Traits Discovery Group has three Postdoctoral positions to initiate exploratory research in the following areas:

Regulation of gene expression in seeds and grain. Previous graduate experience in gene expression and strong molecular biology skills required.
Job Code 9944-SM-BRI

Seed storage protein biochemistry. You will characterize protein processing, accumulation and post-processing properties of heterologous storage proteins from transgenic grain. Previous graduate experience in protein biochemistry, protein purification or cell biology required.
Job code 9945-SM-BRI

Enzyme discovery and characterization. You will clone and characterize novel enzymes that will be useful for altering grain metabolism/composition. Previous graduate experience in gene cloning, protein overexpression and enzyme characterization is required. **Job code 9946-SM-BRI**

TRANSGENIC PLANT ANALYSIS GROUP MOLECULAR BIOLOGISTS

Our Transgenic Plant Analysis Group continues to expand, and with this expansion comes the need for a greater efficiency that will be achieved through automation and high throughput technologies. We have a need for a Technical Team leader whose will work on the bench to supervise and mentor a team of 6-9 scientists as well as interface with many plant transformation and trait groups. Additional responsibilities will include the set-up and implementation of high-throughput systems and equipment for screening transgenic plants. Qualifications for this position include a Ph.D. in biological sciences with a strong background in molecular biology or molecular genetics (or MS with 5+ years of experience in molecular biology). Expertise required in multiplex PCR, Southern blot analysis, robotics and high-throughput automation. Experience with plant genetics, molecular marker assisted breeding, ELISA, Taqman desired. **Job Code 9939-SM-BRI**

We also seek a BS / MS molecular biologist with significant experience in Southern blot analysis and other standard techniques to analyze large numbers of transgenic plants with high efficiency.
Job Code 9930-SM-BRI.

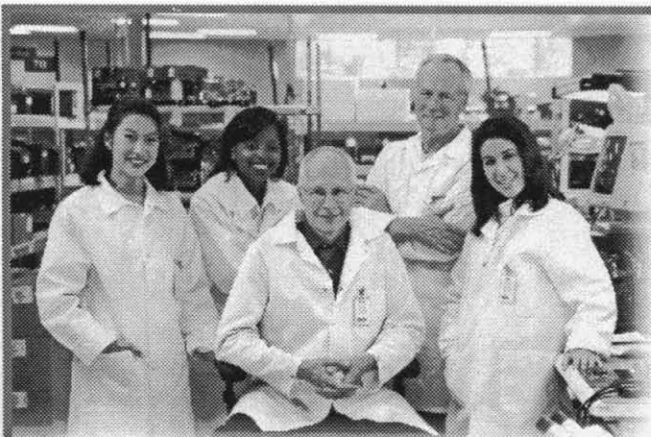
ANALYTICAL SERVICES GROUP PROTEIN ANALYTICAL CHEMIST/ ANALYTICAL BIOCHEMIST POSITIONS

The Analytical Services Group has an opening for a protein analytical chemist/analytical biochemist with experience in the purification and identification of proteins. The candidate will interact with NABRI scientists from various departments to purify and identify proteins. Job responsibilities include operation and maintenance of MALDI and LCQ mass spectrometers, a protein sequencer, FPLC, and HPLC. Minimum academic requirements for this position are a B.S. with more than 5 years experience, or a M.S. in Analytical Chemistry or Biochemistry. **Job code 9935-SM-BRI**

We also seek a protein analytical biochemist to perform compositional analysis of grain. A recent MS (or BS with 3+ years of previous experience) with expertise in protein and/or amino acid analysis is required.
Job code 9948-SM-BRI

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates should forward a resume and cover letter to: novartisbiotech@hiresystems.com. Indicate the **Job Code #** _____-SM-BRI in the subject area. To ensure that your information is uploaded into our HR System, please do not send your resume and cover letter as attachments.

For more information about Novartis visit our website: www.novartis.com. For Job Opportunities at Novartis visit: www.careermosaic.com. Click on "Employers" and follow the alphabetized links to the Novartis site. We are an Equal Opportunity Employer M/F/D/V.



R&D PROFESSIONALS

NEW PRODUCTS ARE
YOUR LIFEBLOOD.

OURS TOO.

When we at Johnson & Johnson ask "what's new?", we're not speaking casually. We're reflecting a belief we all share—innovation is key. Because it is our ongoing innovation of products that help people, like Risperdal and Retin-A, that leads to the ongoing success of Johnson & Johnson, the world's leading health care company.

If you have an intense desire to make our next innovation your claim to fame, the opportunity is now open at the following operating company.



Janssen Pharmaceutica, located in Titusville, New Jersey, produces and markets a broad range of ethical pharmaceutical products. Included are RISPERDAL, for the treatment of schizophrenia, DURAGESIC for chronic pain, and SPORANOX, an antifungal.

Assistant Scientist/Scientist

Testing stability samples in accordance with current laboratory protocols, procedures and test methods, your specific responsibilities will include maintaining an accurate laboratory notebook, including sample data from tests that have been performed. Also, you'll perform daily calibrations and routine maintenance on laboratory instrumentation and equipment and organize the laboratory.

Qualified candidates will have a BS in chemistry or equivalent, 3+ years of experience in an analytical laboratory and GMP training. Job Code: 991751SCI

Scientist/Sr. Scientist/Project Planner

Monitoring and assessing all stability projects or protocols, your primary responsibilities will include maintaining project timelines and project databases. Additionally, you'll support laboratory management by identifying potential problems; make recommendations for corrective action; represent laboratory and support teams at product meetings; and advise laboratory management of timeline issues.

Ideal candidates will have a BS in chemistry or equivalent with experience in an analytical chemistry environment. Strong knowledge of GMPs, MS Word, MS Project and Excel is essential. Excellent communication skills are a must. Some lifting is required. Job Code: 992026SCI

Sr. Scientist/Group Leader

Assisting Laboratory Management in successfully training for cGMP requirements, your responsibilities will include providing analytical and stability support for FDA submissions for all Janssen Products. Also, you'll prepare stability test protocols; manage a group of analysts performing stability testing on products; develop staff; and coordinate work schedules.

Successful candidates will have a BS in chemistry or equivalent with 5+ years of experience in the pharmaceutical industry. A supervisory and GMP training background is essential. Excellent computer skills are a must. Job Code: 992028SCI

As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. We strongly encourage individuals to apply on-line at www.jnj.com or forward a scannable resume, noting operating company and job code, to: Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597. We are an equal opportunity employer totally committed to diversity.

Johnson & Johnson

FOR FURTHER DETAILED INFORMATION REGARDING JOB RESPONSIBILITIES,
WE HIGHLY RECOMMEND YOU VISIT OUR WEB SITE.

www.jnj.com

Directed Evolution/ Agriculture

Maxygen is the leader in the design, development and application of directed evolution technologies to evolve new properties into single gene pathways, plasmids, viruses and genomes. This revolutionary technology along with our rapid growth provides a challenging, stimulating environment for creative, motivated individuals who desire to make a significant contribution toward our success.

Candidates at the Ph.D./MS/BS levels are needed in each of the following areas. Candidates with relevant industrial experience & competencies in molecular biology, bioinformatics, biochemistry, plant transformation and bioassay development are strongly encouraged to apply.

Building a Bridge to the Future...

Plant Pest & Disease Resistance • We seek scientists to develop improved pest & disease resistance strategies using our proprietary DNA shuffling technology. The position requires a strong background in molecular biology & assay development. Experience in biochemistry & cell biology a plus. (Job# SCI0716-PPDR)

Plant Metabolic Engineering • Utilizing directed evolution technologies, scientists are needed to develop new enzymes for the manipulation of the metabolic process in plants. A strong background in biochemistry, enzymology and molecular biology is desired. (Job# SCI0716-PME)

Plant Gene Expression • We seek molecular biologists seasoned in the manipulation of plant gene expression. The ideal candidate will be familiar with plant transformation vectors, and the development of transient assay systems for use in transgenic plant cells. (Job# SCI0716-PGE)

Plant Transformation • We seek molecular biologists and a cell biologist experienced in developing plant transformation systems. Experience with transformation systems, assays for reporter genes, and/or plant tissue culture are essential. (Job# SCI0716-PT)

Maxygen offers an excellent compensation/benefits package. Please visit our website at: www.maxygen.com for more information. Please send your resume to:

Maxygen
HR Dept, (Attn: Job#)
515 Galveston Drive
Redwood City, CA 94063
email: jobs@maxygen.com

MAXYGEN

We are proud to be an Equal Opportunity Employer

That proximity to sources of scientists is particularly useful to the company, because it needs individuals trained in several disciplines. "The ultimate outcome is to deliver a beneficial effect to patients," explains Dinh. "To accomplish this, we must transport drug molecules across different types of barrier, including biological membranes. We need physical scientists, as well as biological scientists, to help understand these environments. We need the appropriate chemistry to facilitate transport through the biological system. It's also valuable to have individuals with a pharmaceutical background."

To attract recruits, company officials emphasize Emisphere's suburban location. "It's very convenient to have three major airports in the metropolitan area," says Dinh. "We are also close to trains. We have the benefit of being outside New York City, but acceptably close — 30 to 40 minutes away."

Greater New York City offers job-seekers more than culture and entertainment. The region has plenty of jobs for new recruits' spouses or significant others. "It's a little easier for them to identify opportunities for dual careers than elsewhere," says Dinh. "Spouses have plenty of opportunity to get into the business area in New York City."

CAMBRIDGE, MASSACHUSETTS

For scientists who live and work in greater Boston, the area has an almost mystical appeal. "There are many highly reputed colleges," says Johanne Kaplan, associate director for gene therapy at Genzyme Corporation. "There is also a high concentration of biotechnology companies, and several renowned medical centers that can offer medical expertise. It's a great environment."

That environment of universities, medical facilities, and biotechnology firms makes a natural fit with Genzyme, which describes itself as a biotechnology and health care products company. "We don't usually have a problem finding people," says Kaplan, explaining that Genzyme can find scientists in just about every necessary discipline in the region. "I would say that most people we hire are from the East Coast," she continues.



Johanne Kaplan

Indeed, location and regional loyalty provide key selling points for the company. "Many of the scientists at Genzyme grew up in the East," says Kaplan. "People often go away for post-doctoral study, but then tend to come back to their roots."

Nearby Canadian provinces provide another steady source of scientists for Genzyme. "We have a significant contingent of Canadians in the gene therapy group," says Kaplan, who herself was born and bred in Montreal.

Kaplan's group covers several disciplines. "My group studies the immunological aspect of gene therapy," she explains. "For example, we use viral vectors such as adenovirus to deliver genes and attempt to correct genetic defects. In this instance, the host's immune response to the vector presents a significant problem. On the other hand, you can take advantage of this immunogenicity. In the context of cancer immunotherapy, adenovirus vectors can be used to mobilize the host's immune response against tumor antigens encoded by the vector."

It's very useful
that all these
institutions
are in the same
time zone.

All that means a need for scientists qualified in various fields, from the Bachelor's degree to the postdoctoral level. "In addition to immunologists, the gene therapy group includes molecular biologists who construct and optimize vectors, chemists who develop formulations for DNA delivery, and biologists who use animal models to test therapeutic approaches against cancer and other diseases," she says.

Beyond participating in greater Boston's scientific community, Genzyme offers its recruits the chance to participate in a kind of invisible college of the East Coast. "Especially in the field of gene therapy there are large efforts in New York City and Philadelphia," says Kaplan. "It's very useful that all these institutions are in the same time zone."

Equally convenient for Genzyme is the short distance between Boston and Washington. "We have collaborators at the National Institutes of Health who are just over an hour away," says Kaplan. "It is very easy to get on a plane and meet with them, all in a day's work." ■

For further valuable career features, go to www.scienceonline.org, click on **Science Careers**, then click on **Advice and Perspectives**.

Important Work.

Life. We're Working On It.

Genzyme Corporation is doing Important Work in biotechnology, life sciences, and health care products. Join us in one of these excellent opportunities for **Scientists** in our *Boston, MA* area locations:

- Framingham, MA -

Neuroscience

Requires PhD in Neuroscience or related field and 1-3 years' academic/industrial experience evaluating treatment of nervous system disorders caused by neurodegenerative disease. Experience with in vivo models, behavioral testing, animal husbandry and drug administration also required. *Job Code: 99-1251SCI*

Structural Protein Chemistry

Provide detailed structural analysis of recombinant proteins. Design and execute experiments and report results. Requires PhD and 0-2 years' experience or BS/MS and significant experience in protein analysis by HPLC and gel electrophoresis; mass spectrometry desirable. *Job code: 99-0194SCI*

Gene Therapy

Design, execute and interpret preclinical experiments in liver-based gene therapy program in genetic diseases; focus on lysosomal storage diseases. Requires PhD and in vivo experience, as well as experience in systemic delivery of gene transfer vectors; knowledge of genetic diseases desirable. *Job code: 99-1886SCI*

Bioanalytical Development

Develop and perform bioassays to support product development activities. Perform assay validations and write technical reports. Participate in assay transfer activities in conjunction with Quality Control personnel. Requires a PhD in Cell Biology, Immunology, Biochemistry or related field. *Job code: 99-1398SCI*

Immunology

Develop and qualify assays to test clinical trial samples. Requires MS/PhD and experience in assay development; experience in a supervisory role desirable. *Job code: 99-0900SCI*

Preclinical Biology

Design and report experiments to determine pharmacokinetics, distribution and toxicology of an antiangiogenic factor for cancer therapy. PhD (preferably in Toxicology or Pharmacokinetics) and 2+ years' experience with in vivo models and data analysis, or MS and 6-8 years' experience; supervisory experience preferred. *Job code: 99-1683SCI*

- Cambridge, MA -

High Throughput Screening Lab, Drug Discovery

Develop high throughput screens, propose new assays in oncology, genetic diseases and immunology, and track the progress of lead compounds toward clinical development. Requires a PhD in Cell Biology, Biochemistry, or Molecular Biology and experience developing quantitative biochemical and/or functional cellular assays; experience in high throughput screening or characterization of small molecule therapeutics is a plus. *Job Code: 99-1215SCI*

Biomaterials Engineering

Multiple opportunities exist to develop and evaluate novel biocompatible medical device coatings in a state-of-the-art surface modification laboratory. Requires team players with PhDs in Biomaterials Engineering or related field and experience with surface modification/analytical techniques and cold plasma deposition techniques. *Job code 99-MATSCI*

Research Associates

(Cambridge & Framingham locations)

Multiple research associate opportunities exist for BS and MS level individuals with 2-10 years' relevant experience. Please visit our Web site for a complete listing of available opportunities. *Job code: 99-R4SCI*

Our compensation and benefits package is one of the most competitive in the industry and includes 3 weeks' paid vacation, 401(k) with company match, extensive insurance benefits and an Employee Stock Purchase Plan.

**Interested candidates, please send
resume with Job Code to:**

**Genzyme Corporation
Human Resources Department
One Kendall Square
Cambridge, MA 02139**

**E-mail: jobs@genzyme.com
or apply online.**

www.genzyme.com

genzyme

Genzyme Corporation is an Equal Opportunity Employer committed to a culturally diverse work force.

Enter the next generation of pharmaceutical discovery and development

It's an exciting time at the Schering-Plough Research Institute. Every day, some of the world's brightest minds are discovering breakthrough therapeutic agents and treatments that will improve the health and extend the lives of millions of people around the world. As we continue to experience unprecedented growth, we are moving confidently into the 21st century and seek exceptional Scientists whose goal is to make a difference in the area of Discovery Research.

DRUG METABOLISM & PHARMACOKINETICS

IN VITRO METABOLISM AND KINETICS SR. PRINCIPAL SCIENTIST

Directing a group of scientists, your primary responsibilities will include providing drug metabolism and pharmacokinetic support of Drug Discovery, especially the areas of *in vitro* screening and metabolic characterization. Also, you'll make *in vitro* and *in vivo* pharmacokinetic projections; screening for *in vitro* metabolic stability; and perform cross species metabolic profiling.

Qualified candidates will have a PhD in Chemistry, Biochemistry, Pharmacology or a related life science and 8+ years of pharmaceutical industry experience including managerial experience. A strong record of scientific accomplishments and excellent motivational and teamwork skills are essential. The ability to apply methods of molecular biology to generate innovative procedures and to aid Drug Discovery is desirable. **Job Code: XHXDD9854SCI**

SR. SCIENTIST

Conducting drug metabolism and pharmacokinetic studies in support of Drug Discovery, your specific responsibilities will include making *in vivo* or *in vitro* pharmacokinetic projections; screening for *in vitro* metabolic stability; and performing cross species metabolic profiling.

Ideal candidates will have a PhD in Biochemistry, Medicinal Chemistry, Pharmaceuticals, Pharmacokinetics or a related life science. Pharmaceutical industry experience a plus. **Job Code: XHXDD8192SCI**

PHARMACOKINETICS - SR. SCIENTIST

Conducting pharmacokinetics analysis, your primary responsibilities will include interpreting and presenting results. Additionally, you'll prepare reports for clinical and non-clinical studies; build PK/PD relationships and apply them to the drug development; serve as an application administrator; and act as a liaison between the Research Information System Department and the Pharmacokinetics Department.

Qualified candidates will have a PhD in Pharmacokinetics with relevant industry experience. Excellent interpersonal and communication skills are a must. Computer project management experience is desirable. **Job Code: XHXDD8127SCI**

Schering-Plough Research Institute is committed to the scientists who are responsible for our success. We offer an excellent compensation package that includes a competitive salary, a cash incentive bonus program, comprehensive benefits, profit sharing and 401(k). Competitive benefits include: group insurance and retirement programs, flexible work arrangements, education assistance, and health and wellness programs.

For prompt, confidential consideration, we invite you to e-mail your resume which MUST include the Job Code for your position of interest to: **SPRIJobs@isearch.com** or send to: **Human Resources, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15-1, Kenilworth, NJ 07033-1300.** Web site www.sp-research.com or e-mail responses preferred. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*

CNS/CV DISCOVERY RESEARCH

ASSISTANT SCIENTIST/ASSOCIATE SCIENTIST - CNS/CARDIOVASCULAR RESEARCH

Qualified candidates will have a BS/MS with 2+ years of experience in Molecular Biology, Molecular Pharmacology and/or Biochemistry; a strong background in G-protein coupled receptor research is desirable. Excellent oral and written communication skills are a must, as is the ability to work independently. **Job Code: XHXDD9106BMSCI**

POSTDOCTORAL RESEARCH SCIENTISTS - GENOMICS

2 Postdoctoral positions available involving functional genomics with an emphasis on the biology of novel G-protein coupled receptors (GPCR). A PhD and experience in molecular biological techniques, mammalian cell culture, protein biochemistry, and characterization of GPCRs is required. Experience with histological techniques is also a plus, but not required. **Job Code: XHXTM99357BMSCI**

1 Postdoctoral position available to examine the biological role of homologs of human genes using *C. elegans* as a model system. We currently have projects focused on Alzheimer's disease, tumor biology, and other signalling pathways. In this position, you will be a vital member of our *C. elegans* functional genomics group. Ideal candidates will have a PhD and experience in molecular biology. A solid background in any aspect of *C. elegans* research is preferred. **Job Code: XHXTMDLBMSCI**

ASSOCIATE SCIENTIST - GENOMICS

MS in Molecular Biology or Biochemistry and work experience using standard biochemical and molecular techniques such as gene cloning and sequencing and/or protein purification. **Job Code: XHXDD9124BMSCI**

TUMOR BIOLOGY

ASSOCIATE SCIENTIST

In this role, you will contribute to the creation of *in vitro* assays for discovery and assessment of novel cancer therapeutics for treatment of prostate cancer. Qualified candidates will have an MS in Biochemistry or a related area and 2-4 years of laboratory experience in enzymology and/or receptor binding. Experience with mammalian cell culture, RNA quantitation and general molecular biology techniques is desired. Prior research experience in tumor biology, steroid metabolic enzymes, G-protein coupled receptors or chemotaxis assays would be helpful. **Job Code: XHXDD9123SCI**



**Schering-Plough
Research Institute**

Using Science for Human Advantage

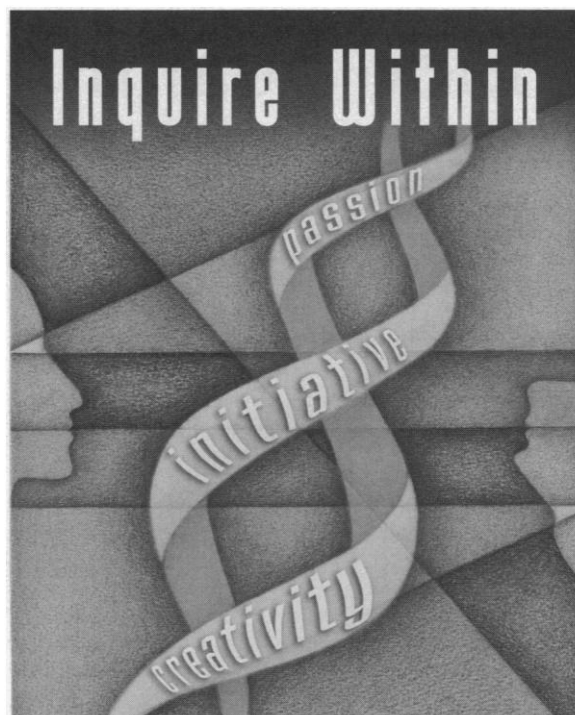
Genentech's people share some pretty uncommon traits.

Not surprising when you consider the scope of our mission – creating breakthrough medicines for conditions like cystic fibrosis, stroke, growth disorders, cancer and heart attacks.

It demands a very special kind of person. Someone who will take risks, accept responsibility, and constantly seek creative solutions.

Consider what you expect from a career and from yourself. Expect the extraordinary? Then share your traits with us.

www.gene.com



POSTDOCTORAL OPPORTUNITIES

The Genentech Postdoctoral Program consists of more than 50 researchers and is a vibrant and intensive environment for advanced scientific training. Here, you will have the chance to conduct basic research in areas of our scientific interest, publish in scientific journals and present work at scientific meetings. As one of the nation's most prolific scientific facilities, publishing at a rate of approximately 250 papers a year, Genentech offers an exceptional range of postdoctoral opportunities. With close to 3,000 patents and another 2,000 pending, Genentech provides a proven pathway for your work to reach the true benefactor—the patient. The following opportunities are available for candidates with a PhD and/or MD and a strong background in the appropriate field.

Protein Design

Two positions are available in the area of protein design for tumor targeting in the laboratory which was instrumental in creating the drug to combat breast cancer—Herceptin™. The first position will focus on engineering human enzymes for prodrug activation. The other position will create, design and characterize antibody and ligand fusion proteins with human nucleases and caspases. Experience in molecular biology, protein biochemistry, enzymology and cancer biology is preferred for both roles. *See Cancer Research 55:63 (1995); Protein Engineering 8:1057 (1995); BioTechnol. 14:192 (1996); Protein Engineering 9:617 (1996); J. of Molecular Biology 270:26 (1997); Protein Science 6:781 (1997); Nature Biotechnology 16:677 (1998); Biochemistry 37:9266 (1998) and Cancer Research 59 (1999). Manager: Dr. Paul Carter. Job Code: SCI469*

Molecular Biology

Study novel ligands/receptors with therapeutic value and their signaling pathways with specific interest in

cytokine receptor biology. The successful candidate will have a background in molecular and cellular biology with a strong publication record. Expertise in ES cell technology would be ideal. *See Nature 369, 533 (1994); Science 265, 1445 (1994); PNAS 92 5292(1995); J. of Experimental Medicine 183, 651 (1996); and the Hedgehog signaling pathway (see Nature 384, 129 (1996); Nature 391, 90 (1998); PNAS 95:13630 (1998); Current Biology 9:76 (1999). Manager: Dr. Frederic de Sauvage. Job Code: SCI459*

As part of the Molecular Biology Department team, this postdoctoral fellow will use genomic strategies to study the function of novel secreted proteins and receptors of potential therapeutic value. This will include establishing suitable models for the study of human disease, united with gene expression analysis using DNA microarrays. Experience in molecular biology and/or genomics, and cellular biology would be an advantage. *Manager: Dr. Victoria Smith. Job Code: SCI437*

This postdoctoral position will study the molecular biology of novel secreted proteins and transmembrane receptors, particularly in the area of innate immunity. Experience in receptor-ligand interactions or receptor-mediated signal transduction would be an advantage. *See NEJM 340, 1834-1835 (1999); Nature 395, 284-288 (1999); Science 277, 818-821 (1997). Manager: Dr. Paul Godowski. Job Code: SCI432*

Apoptosis

This postdoctoral position will focus on the identification of cell death pathway components responsible for apoptosis, a process of fundamental importance in development and one that is intimately involved in the pathogenesis of cancer and neurodegenerative disorders. *See JBC 273:1-2926-2930 (1998);*

Science 281:1305-1308 (1998); JBC 274(15): 10287-10292 (1999); JBC 274(24):16871-16875 (1999); Nature 388:728-729 (1997); Science 277:815-818 (1997); Science 276:111-113 (1997); Science 275:1122-1126 (1997); Nature 385:86-89 (1997); Science 274:990-992 (1996); Cell 85:817-828 (1996). Manager: Dr. Vishva Dixit. Job Code: SCI420

Bioorganic Chemistry/Immunology

Join the departments of Bioorganic Chemistry and Immunology to explore novel strategies in protein design and small-molecule drug discovery. You must have a PhD in Chemistry or Biochemistry with an emphasis in peptide and protein structural analysis. Experience in protein chemistry, biological chemistry, molecular biology, or peptide synthesis is desirable. *Manager: Dr. Jim Masters. Job Code: SCI495*

We offer industry leading benefits and a dynamic environment dedicated to scientific progress. To apply for any of the above positions, send your resume, indicating appropriate job code, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950 (plain typefaces, please) or email your resume to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. EOE.

Genentech, Inc.

incredible people
extraordinary science

Good health relies on all of us.



As a world class leader in Research and Development, SmithKline Beecham continues to pioneer innovative pharmaceutical and healthcare products and services. We have the following opportunity available at our state-of-the-art suburban Philadelphia, PA facility.

Viral Immunology Scientist

The Molecular Virology and Host Defense Department has an exciting position in research projects aimed at the discovery, evaluation and development of novel therapeutic agents for human viral infections using animal models.

You will assist in the development of a respiratory virus inflammation model, and may apply virological, immunological, molecular, and biochemical skills as a member of a multi-discipline team. You must possess a good practical and theoretical understanding of Pharmacology, Molecular Biology, Immunology, or Virology, equivalent to a BS degree, or relevant qualification. You must also possess strong animal handling skills.

Expertise with small animal models of respiratory viral infection, or pulmonary inflammation as well as tissue culture and immunology techniques are preferred.

SmithKline Beecham is dedicated to an innovative workplace and supports you with career long opportunities and learning. We offer a competitive benefits and compensation package. To be considered for this suburban Philadelphia, PA opportunity, please forward your scannable resume to: SmithKline Beecham, c/o National Resume Processing, Ad Code: 990436A, P.O. Box 1070, Burlington, MA 01803. Indicating Ad Code is essential. For a full listing of current opportunities, or to submit a resume online, visit our website at www.sb.com/careers

Realize Your Potential



SmithKline Beecham
Pharmaceuticals

Developing talent through equality of opportunity, M/F/D/V.



GORDON RESEARCH CONFERENCES

Conferences at the Frontiers of the Biological, Chemical and Physical Sciences

visit the *frontiers of science* at:

WWW.GRC.URI.EDU

Our web site contains the complete schedule for the 1999 Conferences.
Apply directly from the web! Check it out now, Conferences fill up fast!



New Conference just added to the summer schedule!

Cyclic Nucleotide Phosphodiesterases, June 12-17 at Waterville Valley Resort in New Hampshire.

Rapid Access to Intervention Development "RAID"

The NATIONAL CANCER INSTITUTE is requesting applications for the following initiative: Rapid Access to Intervention Development (RAID). RAID will make available to academic investigators, on a competitive basis, the preclinical development contract resources of NCI's Developmental Therapeutics Program. The goal of RAID is the rapid movement of novel molecules and concepts from the laboratory to the clinic for proof-of-principle clinical trials. RAID will assist investigators who submit successful applications by providing any (or all) of the preclinical development steps that may be obstacles to clinical translation. These may include, for example, production, bulk supply, GMP manufacturing, formulation, and toxicology. Suitable agents for RAID will include small molecules, biologics, or vaccines. *There are two receipt dates for proposals per year, February 1 and August 1. Current applications must be received by August 2, with all materials submitted directly to the office listed below.* For information on process and procedure, visit the web site, <http://dtp.nci.nih.gov>. Inquiries are encouraged, and the opportunity to clarify issues or questions is welcome. Academic investigators may have collaborations with small-business partners and still qualify for RAID funding. Proposals to produce materials ready for use in clinical trials must have a letter of commitment to actually conduct the trial from an Institution where the clinical trial would occur. Please note that a maximum of two distinct proposals per investigator can be submitted per the application review date. Please contact:

**RAID, Office of Associate Director
Developmental Therapeutics Program, NCI
Executive Plaza North, Suite 843
6130 Executive Blvd., Rockville, MD 20892
Tel: 301.496.8720; Fax: 301.402.0831
Email: sausville@dtpax2.ncifcrf.gov**

Senior Research Scientists



Celera Genomics, a PE Corporation Business formed to complete the sequence of the human genome over the next two years, provides outstanding opportunities to join a rapidly-growing, results-driven organization. Combining an unprecedented high throughput sequencing operation, a massive computer system, and a talented team of molecular biologists and computer scientists, Celera Genomics is positioning itself to be the world leader in the delivery and analysis of genomic information. We are currently seeking keenly intelligent and creative individuals who will thrive in the challenging environment of a revolutionary venture.

The successful applicants will work with Celera Genomic's world-class computational teams to design and implement new algorithms and informatics tools anticipating sector and company informatics needs. These include software systems for determining complete DNA sequences from fragment data, search- and comparison-based tools for extracting new biological knowledge from such sequences, and visually-oriented data-mining systems.

Requires: A Ph.D. in Computer Science or related analytic discipline or equivalent evidence of intellectual achievement; strong problem solving and algorithm design experience; superior communication skills; and the ability to showcase work in scientific publications and at scientific conferences. **Desired:** Experience in computational molecular biology; a proven ability to write efficient code and develop software to solve complex problems; specialty knowledge in the areas of combinatorial pattern matching, information retrieval, data visualization, user-interfaces, large-scale databases and protein function/structure prediction.

If you want to shape the future of computational genomics, apply online at: www.celerajobs.com

You may also mail your resume to: Celera Genomics, Attn: SRS/SC/7-99, 45 West Gude Drive, Rockville, MD 20850. Celera Genomics is committed to a drug-free work environment. EOE, M/F/D/V.



We are a Fortune 500 Company that is expanding our areas of interest. These exciting positions offer the chosen candidate an opportunity to be the expert in their field and provide new products for our company. Considered candidates will have superior communication & writing skills, computer literacy, & come from a work environment which encourages peer review of work plans & frequent project reviews. For opportunities in Research and Development at our Chicago location, we seek the following expertise:

Medicinal Chemist

A Ph.D. in Medicinal Chemistry/Pharmacology & 2-5 years industrial or post doctoral lab experience (pharmacokinetics emphasis) to support new functional product development and/or claims is required. This may involve designing studies to measure functional material efficacy/release from substrates and/or the rate of absorption/metabolism/ elimination of functional material in humans. We are looking for a demonstrated record of achievements in the initiation & completion of medium to long term research projects which lead to product & technology improvements for the company.

Exploratory Chemist

MS or Ph.D. in Pharmacy, Industrial Pharmacy, or Chemistry & 3+ years industrial experience required. Demonstrated expertise in projects related to product formulation and processing to achieve improved sensory properties or other important functional properties related to the delivery of active ingredients also required. Prefer experience with OTC pharmaceuticals. The chosen candidate performs research into physical, chemical, sensory, & processing nature of our product and its related ingredients to identify, develop, and commercialize product, process, and ingredient improvements.

Senior Chemist/Product Developer

MS in Pharmacy (Industrial Program) or BS in Chemistry & 5-10 years progressive experience in developing OTC pharmaceuticals required. Ideal candidate will have developed products from bench scale to production where consumer acceptance of the product is an issue. Candidates from generic drug companies with a broad product line & frequent changeovers, and/or experience formulating nutraceuticals preferred.

Our company is the worldwide leader in our industry. In return for your skills, experience, and hard work, we offer an excellent salary and benefit package including full health, dental, life, bonus, tuition reimbursement, 401K, etc., and a dynamic work environment.

Interested and qualified candidates should send/email their resume and salary history to: BC Reply M-16, 205 W. Randolph St., Suite 1230, Chicago, IL 60606. Email: CLGBrownie@aol.com



University of Connecticut Northeast Utilities Foundation Endowed Chair in Environmental Engineering

The University of Connecticut's Department of Civil and Environmental Engineering and the Environmental Research Institute are seeking a distinguished scholar, a full professor with a record of excellence in research and teaching, to fill a newly established endowed chair in environmental engineering funded by the Northeast Utilities Foundation, the Geib Family Endowment, and UCONN 2000 (a \$1 billion State program).

The incumbent will conduct fundamental research in critical areas of environmental science and engineering; provide scholarly leadership and substantive contributions to the Department, University, and profession; and develop, direct, and teach graduate and undergraduate courses in environmental science and engineering. He/she will control the use of revenue from the \$1 million endowment, subject to the conditions of the endowment.

Salary, benefits, and a competitive start-up package will be commensurate with the record of the applicant. This position is full-time and tenurable at the rank of full professor. It begins as early as September 1999. Applicant screening will begin in July 1999 and will continue until the position is filled. For further information, please see http://www.eng2.uconn.edu/eri/Ad_NUchair.htm

Nominations and applications, including a letter of interest, a current curriculum vitae, and the names of at least three references, should be forwarded to Professor George E. Hoag, Chair, Northeast Utilities Foundation Endowed Chair Search Committee, Department of Civil and Environmental Engineering, U-2037, University of Connecticut, Storrs, CT 06269-2037. Search #99A446.

The University of Connecticut encourages applications from underrepresented groups, including minorities, women, and people with disabilities.

BIOTECHNOLOGY DIRECTOR

RiceTec, Inc. is seeking an experienced scientist to lead its biotechnology program based at a new research facility, soon to be completed near Alvin, Texas. Current goals of the biotechnology effort are to establish a rapid and efficient system for genotyping the diverse rice germplasm collection owned by the company, to support the hybrid rice breeding program through marker assisted breeding technology, to develop and evaluate transgenic rice lines, and to clone and characterize rice genes of commercial importance. The successful candidate will have an extensive background in molecular mapping using several marker systems (RFLP, RAPD, AFLP, microsats etc.) as applied to commercial plant breeding. In addition to complete familiarity with modern techniques of plant molecular biology, recent hands-on experience with high-throughput marker analysis, and automated sequencing technology, the incumbent will need strong interpersonal skills in the leadership role for a lab of 13 scientific staff. A significant component of the job will also entail daily interaction with field scientists involved in phenotypic, agronomic and physiological characterization of rice hybrids. Candidates should be prepared to take responsibility for maintaining contacts and collaborations with other laboratories involved in cutting-edge genomics research both in academia and industry.

The successful candidate will hold a Ph.D. degree in a relevant area of molecular biology with at least 5 years of experience in managing a molecular marker program, or an MS degree with 10 years of leadership experience in the same type of program. Candidates with industrial experience are especially encouraged to apply. This position will report functionally to the Research Director and administratively to the Executive Vice President, and strong verbal and written communication skills are essential.

RiceTec, Inc. is a stable, privately owned company, committed to the improvement of rice agriculture on a global basis. The competitive salary will be commensurate with experience. Please E-Mail resume to resumes@RiceTec.com or mail to:



RiceTec, Inc.

Human Resources Dept.
RiceTec, Inc.
P.O. Box 1305
Alvin, Texas 77512

RiceTec is an equal opportunity employer.

Sunnybrook & Women's College Health Sciences Centre is the amalgamation of three of Canada's finest health care organizations, Sunnybrook Health Science Centre, Women's College Hospital and the Orthopaedic and Arthritic Hospital. The new organization is an academic centre of excellence, fully affiliated with the University of Toronto, which provides patients with a full range of high-quality, values-based, patient-centred services, and is a leader in women's health.

VICE PRESIDENT, RESEARCH SUNNYBROOK & WOMEN'S COLLEGE HEALTH SCIENCES CENTRE

We seek a dynamic and proven leader to advance our Research Group into the new millennium. Reporting to the President & CEO, the Vice President of Research will lead and support our existing research services in the areas of Heart and Circulation, Aging, Mental Health, Oncology, Women's Health, Musculoskeletal, Trauma and Community Services. Research is focused on these clinical programs as well as the disciplines of biological sciences, clinical epidemiology and health services research, clinical physiology, imaging and bioengineering, women's health and musculoskeletal.

Sunnybrook & Women's has superb research facilities and a national and international reputation for excellence. The Research Program conducts leading-edge, bench-to-bedside research in 210,000 square feet of space throughout the campus. External funding has grown at an incredible rate — from \$3 million in 1991 to over \$25 million today.

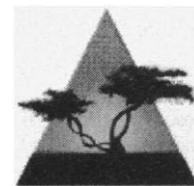
The successful candidate will be responsible for leading the further development of research at Sunnybrook & Women's through promoting exceptional standards for research endeavours; recruitment of research staff to meet the Centre's academic goals; ensuring the continued growth in research through expansion of the Centre's funding base; and integrating basic research and clinical activities within the Centre.

Candidates should be eligible for academic appointment to the rank of Professor and have:

- a Ph.D. and/or M.D. with an international reputation of excellence in research
- highly respected leadership abilities with research achievement
- impeccable professional and research integrity
- the ability to promote communication and collaboration across a broad spectrum of research interests
- the ability to represent Sunnybrook & Women's locally, nationally and internationally

Interested candidates may apply in writing, incl. their curriculum vitae, by **August 6, 1999** to:

Dr. David McCutcheon
President and C.E.O.
Sunnybrook & Women's College
Health Sciences Centre
2075 Bayview Avenue, Room C-104
Toronto, Ontario, M4N 3M5
Fax: (416) 480-6033



Akkadix

Akkadix Corporation is a rapidly growing, agricultural biotechnology company using functional genomics, bioinformatics, structural biology, combinatorial chemistry, and high throughput screening to discover novel plant genes and agrochemicals. Akkadix also has access to proprietary plant genes regulating important traits and to germplasms of major crop species. We are currently hiring a world class research staff, and we are seeking highly talented, motivated and creative individuals with a record of accomplishment (publications and/or patents) for the following research programs:

Gene Expression and Regulation: B.S.- or M.S.-level scientists trained in molecular biology, with experience in cDNA cloning, DNA sequencing, in vitro mutagenesis, plant transformation, RNA analysis, RNase protection, in situ expression of RNA and protein, or phage display.

Signal Transduction: B.S.-, M.S.- or Ph.D.-level scientists trained in molecular biology and/or genetics, with experience in *Agrobacterium tumefaciens* transformation of *Arabidopsis*, transgenic screening, nucleic acid isolation, northern and Southern analysis, PCR, cDNA cloning, and in vitro mutagenesis.

Parasitic Nematode Control: B.S.- or M.S.-level scientists trained in molecular biology and/or nematology, with experience in culturing phytopathogenic nematodes, *Agrobacterium rhizogenes* transformation, transgenic screening, phage display, gene cloning, DNA sequencing, vector and plant transcription unit design and construction, and in situ gene expression analysis.

Bioinformatics: B.S.- and M.S.-level computer support staff and junior Ph.D.-level scientists with multidisciplinary skills spanning computer science and biology, programming in Perl, C/C++, and/or Java, storing and mining vast amounts of information, lab automation, expression profiling, and sequence analysis.

Members of our scientific advisory board include Roger Beachy (Donald Danforth Plant Science Center), Chris Lamb (University of Edinburgh), Rick Dixon (Noble Foundation), Richard Michelmore (UC, Davis), Ethan Signer (MIT), and Carlos Barbas. For more information please visit our web site (<http://www.akkadix.com>).

Akkadix offers a competitive package of compensation, health benefits, and retirement plan (401K). We are located only minutes from the Pacific Ocean near the Scripps Research Institute, Salk Institute, and UCSD. Applicants should send a cover letter indicating interest in a particular research program and a CV describing research experience and names of three references to: **Akkadix Corporation, Attn: Human Resources, 12626 High Bluff Drive, Suite 250, San Diego, CA 92130, or by fax (858 794-5525).**

Director, Urologic Research

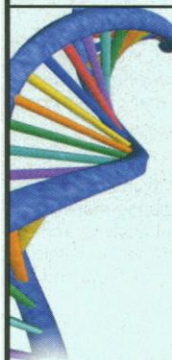
Mount Sinai School of Medicine is a leader in medical research and education. Our Milton and Carroll Petrie Department of Urology seeks a Director of Urologic Research to coordinate a research program focused on urologic oncology. This will involve the development of an independent research program and interaction with ongoing departmental research activities in gene therapy, angiogenesis, and tumor markers in prostate and bladder cancer. A background in molecular biology, tumor biology, and immunology is desirable. Academic appointment consistent with experience and joint appointments in basic science departments and the Derald H. Ruttenberg Cancer Center will be available.

**Mount
Sinai**

We offer an excellent salary, comprehensive benefits package, a challenging work environment, and services which enhance the quality of worklife. For consideration, please forward C.V. to: **Dr. Michael J. Droller, Chairman, Milton and Carroll Petrie Department of Urology, Box 1272, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574; Fax: 212-876-3246.** We are an equal opportunity employer fostering diversity in the workplace.

Mount Sinai School of Medicine

Software Engineering



Celera Genomic's team of world class software engineers are developing integrated tools using the Internet and electronic commerce technology. We are currently seeking keenly intelligent and creative individuals, who will thrive in the challenging environment of a revolutionary venture, to join our team in the following positions:

• Software Engineers

In this role, you will work to develop software solutions to chromosome mapping problems including sequence annotations, mapping conflicts identification and object identity resolution. Additional duties include performing data transformation, inter-process communication, and data development.

Requires: BS in CS or related field (Master's preferred); 2+ years of full life cycle application building and product development experience; relational database development background with Sybase, Oracle or an RDBMS; and experience with C, C++, Java and/or Perl. **Desired:** MS in Biology; object-oriented analysis and design experience; familiarity in using configuration management tools and procedures.

If you want to shape the future of computational genomics, apply online at: www.celerajobs.com

You may also mail your resume to: **Celera Genomics, Attn: SE-FL/SC/7-99, 45 West Gude Drive, Rockville, MD 20850.** Celera Genomics is committed to a drug-free work environment. EOE, M/F/D/V.



CELERA

A PE Corporation Business



You have the vision. Use it.

Biacore, Inc. (<http://www.biacore.com>) the acknowledged global leader in developing, manufacturing and marketing of unique and innovative products to detect and monitor biomolecular binding. BIACORE® systems are used worldwide in pharmaceutical, biotechnology, diagnostic, academic and government institutions. BIACORE® systems monitor real-time binding events and reveal more information about biological interactions than any other single alternative technology.

Biacore technology has seen a growing acceptance within the scientific community. As a result, Biacore is building its team in order to meet current and future customer needs. Currently we are looking for dedicated professionals in our Applications and Sales area.

APPLICATION SCIENTIST

Responsibilities include: customer training and telephone support, product demonstrations and seminars, and the development of new applications for biomolecular characterization. B.S. to Ph.D., minimum five years laboratory experience in Biochemistry, Biophysics, Protein Characterization, and/or Assay Development. Strong written and verbal skills required. Instrument background and knowledge of kinetics would be a plus. Positions to be placed in North East. Travel required.

SALES ACCOUNT SCIENTIST

Responsibilities include: Sales of capital equipment within industry and academia to R & D scientist. Develop new customer relationships and support existing customer needs. Compile prospective customer database, analyze customers' research needs and recommend potential solutions. Develop and implement annual territory business plan leading to the accomplishment of budget. Display or demonstrate product and emphasize salable features. Prepare reports on a monthly basis of business developments. Successful candidate must be able to work in a team environment. B.S. in Life Science field or two years related experience and/or training. One to four years experience in field sales in the same or related field. Position to be placed in South East. Travel required.

Send resume with references and salary history to:

**Human Resources, Biacore, Inc.
200 Centennial Avenue, Suite 100
Piscataway, NJ 08854**

We are an equal opportunity employer m/f/d/v.

Opportunities

Children's
Hospital
Medical
Center
Cincinnati

Developmental Biology Assistant/Associate/Full Professor

The Developmental Biology Division of the Cincinnati Children's Hospital Research Foundation is undertaking a major expansion under the future direction of Dr. Christopher Wylie. It is anticipated that at least eight tenured or tenure track faculty positions will be filled over the next five years. Applicants at all levels will be considered. Organogenesis, stem cell differentiation, and pattern formation are major interests, but innovative, high quality research in all aspects of developmental biology will be the prime consideration. Attractions include outstanding start up packages, new research facilities, an excellent graduate program and modest teaching responsibilities. This search will continue until all positions have been filled.

Please provide curriculum vitae, names and addresses of three references, and a description of research interests to:

Dr. Steven Potter, Chair, Search Committee
Division of Developmental Biology
Children's Hospital Research Foundation
TCHRF 2013 • 3333 Burnet Avenue
Cincinnati, OH 45229

Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.

Promega Post Doctoral Fellowship Program

Feel the positive effects of post doctoral opportunities at Promega! A world biotechnology leader, we're committed to advancing life science research through our two-year post doctoral program that offers a competitive salary, exceptional benefits and team support.

Directed Evolution

Participate in groundbreaking research of enzyme activity in non-native chemical environments involving methodologies for creating molecular diversity, library screening, robotics for high-throughput analysis, and molecular modeling for structural analysis. Must have a Ph.D. in Biochemistry or related field, and experience in molecular biology and modeling, and enzymology lab techniques.

Synthetic Organic Chemist

Plan and execute multi-step synthetic schemes and interpret data including NMR, IR, UV-Vis, mass spec. and HPLC. Must have a Ph.D. in Organic or Bio-Organic Chemistry, along with extensive knowledge in synthetic organic chemistry and record of publication and/or presentation of data. Experience in aromatic heterocyclic and/or nucleoside chemistry a plus.

Call for Proposals

Promega currently is accepting proposals for self-designed fellowships. Here is your chance to influence the future of research in the areas of:

**Molecular Biology
Chemistry
Protein Chemistry
Bioinformatics**

**Cell Regulation/Signal Transduction
Biochemistry
Proteomics
Immunology/Neurobiology**

To apply for the above positions, email resume, indicating the post doctoral position of interest, to hr@promega.com or send to Promega, 2800 Woods Hollow Rd., Madison, WI 53711. Fax (608) 277-2601. Submit proposals for self-designed fellowships to the same address or email with attention to K. Zingg. EOE

Visit us at: www.promega.com



The starting line for the pursuit of DISCOVERY...

SYMPOSIUM

Whitehead Symposium XVII

"The Biology of Drug Discovery"

**October 24 - 26, 1999
Kresge Auditorium, MIT**

Speakers include: Susan Amara, Carolyn Bertozzi, Patrick Brown, Jonathan Ellman, Ronald Evans, Stanley Fields, Judah Folkman, Claire Fraser, Ulrike Heberlein, Ira Herskowitz, Peter Kim, Chaitan Khosla, Eric Lander, John Mekalanos, Stuart Schreiber, Edward Scolnick, Robert Siliciano, Jose Varghese, Inder Verma, Charles Weissman, Jim Wells, Dyann Wirth.

Registration

Regular (includes postdocs): \$100
Student: \$35 (ID required)
MIT Student: No charge

To obtain a registration form call Whitehead Institute Public Affairs at 617-258-5183, or visit Whitehead Institute's website at www.wi.mit.edu and click on "conferences."

Associate/Staff Scientist- CNS Diseases Research

Be at the forefront of drug development research with DuPont Pharmaceuticals Company. We will be the most exciting Company to work for on the planet. Ideas, outstanding performance and the growth and caring of our people will be at the center of our value system. We will be a top-tier Company driven with a powerful R&D engine through customer-driven marketing innovation. Come and be a part of our success. We have an immediate Associate/Staff Scientist opportunity at our facilities in Wilmington, DE/Glenolden, PA.

We are looking for an individual with demonstrable experience in pharmacological/biochemical techniques used to study signal transduction mechanisms, such as radioligand binding assays, second messenger assays, immunocytochemistry, immunoprecipitation techniques (ELISAs), enzyme assays, and chromatographic techniques. The candidate should have tissue culture experience. Experience with basic molecular biological techniques is advantageous, but not required. Excellent verbal and written communication skills are required, along with the ability to work as part of a highly interactive and multidisciplinary drug discovery team. BS/MS in the life sciences or related disciplines with a minimum of 2-3 years experience in an academic or industrial laboratory is required.

DuPont Pharmaceuticals Company can offer you an excellent compensation and benefits package. To be considered, please forward your resume to: DuPont Pharmaceuticals Company, Human Resources-SD-LF, E400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer, M/F/D/V.



DuPont Pharmaceuticals Company



DEAN
**Bayer School of Natural
and Environmental
Sciences**
DUQUESNE UNIVERSITY

Duquesne University invites applications and nominations for the position of Dean of the Bayer School of Natural and Environmental Sciences. The Bayer School includes the Departments of Biological Sciences, Chemistry and Biochemistry, and Physics, as well as the Center for Environmental Research and Education.

Candidates are sought with the vision, energy and leadership ability to work collegially and effectively to continue the unprecedented growth of the School and its programs.

Duquesne University has nearly 10,000 students in its nine schools. Its attractive campus overlooks the city of Pittsburgh, one of America's most livable cities.

Applications should be submitted by September 1, 1999. Application and nomination materials, including a curriculum vitae and references, should be sent to:

Dean Thomas J. Murrin, Chair
**Bayer School of Natural and Environmental
Science Search Committee**
Duquesne University
Rockwell Hall Room 709
600 Forbes Avenue
Pittsburgh, PA 15282

*Duquesne University is an Equal Opportunities,
Affirmative Action Employer*

For additional information, see our Web
Site at <http://www.duq.edu>.
*Education for the Mind, the Heart, and
the Soul.*

MAKING A WORLD OF DIFFERENCE IN BIOTECHNOLOGY!

As a global leader in the biotechnology arena, Genencor International develops and markets innovative enzymes that are highly efficient and cost-effective. Currently, we are seeking the following scientific professionals to contribute to our exciting efforts at our state-of-the-art facility in Palo Alto.

SCIENTIST II R&D/Expression and Secretion

Responsible for developing microbial strains for the expression and secretion of proteins from a variety of sources, your initial focus will be on protein production from *Streptomyces*. In addition, you will be expected to apply the latest molecular genetics, genomics and expression methods to improve protein productivity and secretion of foreign proteins from several host systems. You must possess a PhD and 2-5 years experience in a research and/or development environment (postdoctoral experience is acceptable). You will also need in-depth knowledge and skills in the field, along with the abilities to lead a multi-disciplinary project, mentor and provide technical guidance to RAs, generate quality ideas for investigation and clearly communicate usefulness of ideas to reviewers. Sound knowledge of Microbial Genetics, Molecular Biology, and/or Biochemistry is required. Experience with foreign protein expression and secretion in microbial host is preferred, and in-depth knowledge of factors affecting transcription, translation or protein secretion from a variety of microbial systems is highly desired. A working knowledge of *Streptomyces* is advantageous. Job Code SCI45R99

SCIENTIST II Bioinformatics

We are seeking a bioinformatics scientist to join a small and dynamic bioinformatics team working closely with "wet-lab" biological scientists. This position provides an opportunity for you to put your stamp on a successful biotechnology company. You will be expected to develop novel analysis tools, bring functions in-house, and assist in the bioinformatics education of Genencor's R&D community. To be successful, you must possess a PhD or equivalent in the biological sciences, Computer Science, or a related field, and 3+ years relevant bioinformatics experience. You should have knowledge of advanced data mining techniques, gene family classification, and DNA array expression data processing. Experience with relational databases is ideal. In addition, you should have extensive experience working in a UNIX environment and proficiency in one or more of the following languages: Perl, C/C++, Java or similar language. Outstanding teamwork and communication skills will be essential to your success in this highly collaborative and multi-disciplinary environment. Job Code SCI44RA99

We offer a competitive compensation and benefits package, including 3 weeks of paid vacation, a generous 401(k) matching plan and a retirement plan. For consideration, please submit your resume/CV, indicating the position of your interest, to: Genencor International, Inc., 925 Page Mill Road, Job Code: _____, Palo Alto, CA 94304-1013, Fax: (650) 845-6503, email: hr@genencor.com. Background checks will be conducted. An equal opportunity employer M/F/D/V. www.genencor.com

GENENCOR
INTERNATIONAL

USF University of
South Florida

The College of Medicine (COM) at the University of South Florida (USF) is seeking an outstanding scientist and administrator to serve as

Associate Dean for Research and Professor

USF is among the 20 largest universities in the United States and is the largest metropolitan university in the southeast. USF was ranked a Research University II by the Carnegie Foundation and was designated a State University System of Florida Research I institution. The COM is part of the Health Sciences Center, which includes the Colleges of Nursing and Public Health, the Moffitt Cancer Center & Research Institute, James A. Haley VA Hospital, and Shriners Children's Hospital. In addition, the COM has major affiliations with Tampa General Hospital, All Children's Hospital, and the VA Medical Center - Bay Pines.

Position and Qualifications:

The Associate Dean will report to the Vice President for Health Sciences & Dean of the COM, and will work closely with the USF Vice President for Research to increase external federal funding for medical research. Other responsibilities will include internal review and pre-approval of grant proposals, development and facilitation of research mentoring programs; promotion of cooperation among affiliated programs, identification and promotion of new sources of funding, and direction of a research data management service. The position will also collaborate with USF regulatory and service offices.

The successful candidate must have an M.D. or Ph.D. with a minimum of five years of continuous productive accomplishment at the rank of Professor or equivalent. In addition, extensive administrative experience in grants and research development and a thorough knowledge of laws, rules, and regulations pertaining to the research enterprise are required. The successful candidate must also have evidence of extensive grant support and a history of developing interdisciplinary, federally funded research programs; an outstanding record of productive research/creative work of at least national visibility and an outstanding record of achievement in either teaching or service; excellent communication skills; and evidence of fiscal, human resource management and leadership skills combined with commitment to a collegial environment and a team approach.

Application Process

Interested individuals should send a cover letter, curriculum vitae, and references to George R. Newkome, Ph.D., Vice President for Research and Chair of the Search Committee, University of South Florida, 4202 E. Fowler Avenue, ADM 200, Tampa, FL 33620-5950.

Applications must be received no later than 5:00 p.m. EST on September 15, 1999.

References will not be contacted until advanced stages of screening, and candidates will receive prior notification.

The State of Florida has a Public Meetings Law and a Public Records Law and all university searches are conducted under the terms thereof. All meetings of the Search Committee are publicly announced and conducted. All documents submitted to the Committee are treated as open material with the exception of evaluative documents specific to the performance of the faculty of the State University System of Florida.

The University of South Florida is an equal opportunity, affirmative action, equal access institution. For disability accommodations contact Lorraine Diecidue, (813) 974-5481 at least five working days in advance of need.

For more information, visit the COM online at <http://coml.med.usf.edu/index.html>.

www.usf.edu • 4202 E. Fowler Ave, Tampa, FL 33620

WE'VE GOT CAREERS

DOWN TO A SCIENCE.

With a new state-of-the-art facility in North Carolina's Research Triangle Park, Covance Biotechnology Services provides the biotechnology and pharmaceutical industry with world-class process development and cGMP manufacturing for recombinant products. Join us as we put our clients' products and your career onto the fast-track. We are currently recruiting for the following key positions:

■ **SCIENTIST, FERMENTATION/CELL CULTURE DEVELOPMENT**
In this position, you will be responsible for the development of cell culture processes (mammalian, hybridoma and insect cell) for the manufacture of biopharmaceuticals. A Ph.D. or equivalent experience in Cell Biology, Microbiology, or Biochemical Engineering and 5+ years of experience is required. Knowledge of relevant analytical techniques and a good understanding of cell biology and cell line development are also essential. (Job Code: N-063)

■ **SCIENTIST, PURIFICATION DEVELOPMENT**
In this position, you will be responsible for the development of processes for the manufacturing of biopharmaceuticals and the transfer of these processes to Covance cGMP manufacturing facility. A Ph.D. or equivalent experience in Biochemistry or Protein Chemistry is required. 5+ years of experience in protein purification and protein chemistry is also required along with knowledge in the areas of chromatographic methods, centrifugation, and ultrafiltration techniques. Relevant cGMP experience will be considered a significant plus. (Job Code: N-059)

■ **SCIENTIST, FORMULATION DEVELOPMENT**
In this position, you will be responsible for the development of formulations and formulation processes for protein therapeutics. Candidate should be knowledgeable in the field of biophysical chemistry and in techniques to achieve protein formulations with long term stability. Should have experience in developing formulations for lyophilization as well as lyophilization cycle development. Analytical experience should include methods for quantitation of protein degradation and characterization of degradation products. A Ph.D. or equivalent experience in Biochemistry or Protein Chemistry and 5+ years of relevant experience required. Relevant cGMP experience a significant plus. (Job Code: N-054)

Please send resume to: **Covance Biotechnology Services, Director—Human Resources, Job Code: _____, 3000 Weston Parkway, Cary, NC 27513; FAX: (919) 678-0555; E-mail: biotechcareers@covancebio.com** Only those selected for further consideration will be contacted. PRINCIPALS ONLY. Covance is an equal opportunity employer.

COVANCE
THE DEVELOPMENT SERVICES COMPANY
Shaping Solutions

Visit us on the Web at: www.covance.com

PRE- & POSTDOCTORAL TRAINING IN MAMMALIAN GENETICS

The Jackson Laboratory, a non-profit research center, provides a unique research environment with unparalleled resources for training animal models of development & disease.

Areas of expertise include:

Cancer, Developmental Biology/Aging,
Genetics of Complex Traits, Genomics,
Immunology/Hematology,
Metabolic Diseases, Neurobiology,
Bioinformatics/Statistical Genetics
Cryopreservation/Assisted
Reproduction

Letters of application should include: curriculum vitae, statement of research interests, list of publications, and names of three references. Predoctoral program is in conjunction with the University of Maine and is limited to US citizens or permanent residents.

To apply contact: Suzanne Serreze, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609 Phone: 207-288-6420; FAX: 207-288-6079; e-mail sbs@jax.org; <http://www.jax.org>
EO/AA Employer



Director, Biological Research

Emisphere Technologies, Inc., a publicly held company, is committed to developing breakthrough therapies for oral drug delivery. Company growth has created an opportunity for a position located in our Tarrytown, New York research facility (1/2 hour north of New York City).

Position requires a Ph.D. plus a minimum of 12 years experience in conducting and managing biological research in the pharmaceutical industry. Selected candidate will be the head of the Biological Research Department and will be responsible for planning and directing biological research activities focused on the research, development and commercialization of novel pharmaceutical products. He/she must be capable of establishing research programs in understanding transport and biochemical mechanisms, and tolerability profiles in *in vitro* and *in vivo* biological systems. Must possess management experience along with effective and proven leadership skills. Background in drug delivery is a plus.

He/she will be expected to coordinate multidisciplinary assignments according to areas of sub-specialization, review and report progress, evaluate results and redirect efforts where necessary as well as determine technical validity and commercial viability of work performed. Additional responsibilities entail designing and managing externally funded research programs. Selected candidate will also be expected to review and approve methods, techniques, procedures and standards applicable to the department, ensuring conformance with accepted scientific principles and practices as adapted to pharmaceutical industry requirements, government and other agency regulations. In concert with the Management team, he/she will participate in strategic planning of R&D programs to fuel the growth of the Company. The incumbent will be expected to collaborate effectively with all levels of management and scientific staff as well as with external scientific collaborators.

Candidate will also be involved in preparation of new patents and updating of existing patents in coordination with patent counsel. He/she will recommend long-range plans and prepare budgetary estimates for the department. Incumbent will be expected to keep abreast of scientific advances in biological research and communicate pertinent information to department members as well as encourage and support career development of staff.

We offer competitive compensation and benefits package, including opportunity to participate in the success of the company through employee stock option programs. **Please forward your resume to: Human Resources - Dept. SD, Emisphere Technologies, Inc., 765 Old Saw Mill River Road, Tarrytown, NY 10591. Fax: (914) 347-0108 or (914) 347-2498. E-mail: Bmohl@Emisphere.com.** EOE, M/F/D/V.

ASSAY DEVELOPMENT BIOMOLECULAR SCREENING

Cambria Biosciences is a biotechnology company developing genetically validated targets, screens, and candidate products for the control of invertebrate pathogens of plants and animals. We are seeking PhD and BS/MS scientists to design and implement assays for high-throughput biomolecular screening.

You should have a degree in biochemistry, cell biology, or related field, with 2+ years of industry experience in biomolecular screening using tissue culture, expression systems, multiwell plate assays, non-isotopic detection methods, compound library handling, and laboratory automation. Successful applicants will possess excellent communication skills, computer proficiency, team orientation, and a proven capacity to handle multiple projects. The ideal senior candidate would also have experience in using genetic model systems and managing external collaborations.

Cambria offers competitive salaries and benefits, plus the opportunity of working in an entrepreneurial scientific environment amidst the world's greatest concentration of universities and biomedical research institutions. Please e-mail or fax your resumé by Aug 31 to: **Human Resources, Cambria Biosciences LLC, 415 South St., MS-008, Waltham, MA 02454-9110; Fax: (781) 736-3107; e-mail: info@cambriabio.com.** EOE



Faculty Hiring Initiative in POST-GENOMIC BIOTECHNOLOGY

The University of Illinois at Urbana-Champaign

The Vision. The University of Illinois at Urbana-Champaign is announcing a major faculty hiring initiative to expand and lead a new campus-wide program in biotechnology. The vision of the program is to foster a multidisciplinary environment that will support the development and application of new technologies for studying the organization, function and evolution of prokaryotic and complex genomes, including those of agricultural importance. The program will build on established excellence in bioinformatics, engineering, genomics and the biological sciences, and a strong tradition of interdisciplinary interactions between the physical, biological and agricultural sciences on the Urbana campus. The faculty hiring initiatives is being coupled with broader campus, state and community efforts to enhance research, education, outreach and economic development in biotechnology.

The Faculty Hiring Initiative. The faculty hiring initiative plans to add up to 25 new faculty lines during the next 3 years. Hiring will be focused in five priority areas:

- I. Bioinformatics
- II. Functional Genomics of Microbes, Plants and Animals
- III. Macroanalytical Systems
- IV. Cellular and Molecular Bioengineering
- V. Developmental and Integrative Biology

Appointments are open at all professorial ranks and may be tenured or tenure-track. Appointments can be made in one or more departments in the College of Agricultural, Consumer and Environmental Sciences, the College of Engineering, the College of Liberal Arts and Sciences, the College of Medicine, or the College of Veterinary Medicine. Generous start-up packages will be available for all positions. An effort will be made to co-locate the new hires with complementary programs so as to maximize the potential for interdisciplinary research.

The Environment. The university has state-of-the-art infrastructure to support research in modern biology and biotechnology. The university is home to a number of large-scale multidisciplinary centers, institutes and programs, including the National Center for Supercomputing Applications, the W. M. Keck Center for Comparative and Functional Genomics, The Biotechnology Center, and The Beckman Institute for Advanced Science and Technology. The campus also develops, manages and subsidizes service facilities for NMR, mass spectrometry, flow cytometry, transgenic animal production, electron microscopy, protein sequencing and peptide synthesis, high throughput DNA sequencing, microarray technology and microfabrication, bioinformatics and a number of other core technologies. The campus is committed to maintaining and upgrading its infrastructure to meet the needs of the new faculty hires.

Applications. Interested individuals are invited to submit a curriculum vitae, a description of research interests and the names of three persons who can serve as a reference. Applications will be accepted and evaluated on a continuing basis. Applications should be sent to:

Dr. Tony G. Waldrop
Office of the Vice Chancellor for Research
University of Illinois
420 Swanlund Administration Building
601 East John Street
Champaign, IL 61820

The University of Illinois is an Affirmative Action, Equal Opportunity Employer.

Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.
Accuracy, Efficiency, Convenience. Accuracy, Efficiency, Convenience.

Bayer NAD: Expanding the Possibilities

Bayer Nucleic Acid Diagnostics (NAD) seeks talented professionals eager to be challenged in an expanding entrepreneurial environment offering career opportunities and the resources of an established, worldwide company. We currently have the following openings available at our headquarters located on the shores of the San Francisco Bay.

RESEARCH & DEVELOPMENT

Director of Research

You will be the technical leader of the lung cancer program. This is a multifaceted program to define tests, methods, and systems such as cell imaging for the early detection of lung cancer. Your responsibilities will include management of 8-10 R&D staff members, including PhDs and technologists, working to develop assay systems which meet the primary objective of this program—the utilization of cell imaging systems with novel markers to detect early lung cancer. You must possess a PhD or MD or related degree and 10 years R&D experience in cell imaging, immunology, and related areas. Strong publication research is required.

CUSTOMER & SCIENTIFIC SUPPORT

Manager, Training Programs

You will direct the development of training/education programs in nucleic acid technologies in diagnostics to successfully educate individuals from varying technical, cultural, and geographic backgrounds. Experience of 2-5 years in training in the biotechnology industry, preferably in nucleic acid technology, is essential to your success. In addition, you must have expertise (PhD preferred) in molecular biology, biochemistry or virology, and experience or a background in clinical laboratory and nucleic acid technologies such as PCR, TMA and bDNA.

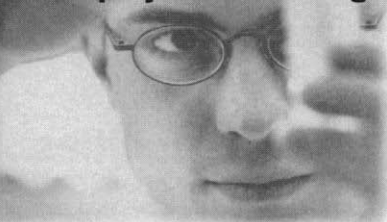
Conveniently located in the East Bay and overlooking beautiful San Francisco, we offer a dynamic working environment and an excellent total compensation and benefits program. To apply, please fax resumes to (510) 923-8464; or mail to Bayer Nucleic Acid Diagnostics, NAD-W 849, 4560 Horton Street, Emeryville, CA 94608; or email to mary.letterii.b@bayer.com



Business Group Diagnostics

ICOS

**1 biopharmaceutical
company worth watching.**



There are a number of good reasons why a lot of people are counting on ICOS. For one, our advancing pharmaceutical pipelines boast several product candidates, targeting multiple disease indications. Secondly, our growing list of patent applications offers a tangible measure of our progress. And finally, our vigorous clinical activities and expanding partnerships offer a climate of accelerated development and new opportunities at our beautiful location near Seattle, Washington.

Research Scientist

We are seeking a highly qualified Scientist with proven research abilities to join our leukocyte biochemistry group. Your primary goal will be to expand our efforts on G protein Coupled Receptors. This will involve cloning, expression, and assays of novel GPCRs, assisting with HTS, and conducting basic research into the functioning of GPCRs. In addition, you will focus on developing reproducible methods for Monoclonal Antibody production against GPCRs. To be successful, you must possess a PhD, a background in molecular biology, immunology, biochemistry, and cell biology, plus demonstrated independent research and teamwork skills. Postdoctoral experience is preferred. We are particularly interested in candidates who will bring new techniques to the laboratory, such as cell biology or lipid biochemistry.

At ICOS, we are poised to establish the medical significance of our discoveries and develop product candidates with high commercial potential. For immediate consideration, please send your resume, indicating Job Ref #GRA0699/699, to: ICOS Corporation, PO Box 375, Burlington, MA 01803. Email: icos@webhire.com. Fax: 1-800-283-8271. EOE. You may also see our job postings at www.icos.com. All positions are located in Bothell, Washington.

icos

Executive Director ILSI Risk Science Institute

ILSI





International
Life Sciences
INSTITUTE

The International Life Sciences Institute (ILSI), a worldwide non-profit, scientific foundation, seeks an executive director for its Washington DC-based Risk Science Institute (RSI). The ILSI RSI was established in 1985 to improve risk assessment methodology by strengthening the scientific principles on which risk assessments are based.

The position responsibilities include identifying critical areas where research is needed to improve the methodology of assessing human health risks; managing ILSI RSI scientific programs; providing oversight and guidance for grants with outside agencies, including the U.S. government; proposing and administering a yearly budget; staff management and development; and identification and maintenance of funding sources for RSI programs. Requirements include a relevant degree (M.D. or Ph.D. in toxicology, pharmacology, or related science) a minimum of ten years of progressively responsible scientific and managerial experience at an executive and/or senior staff level; outstanding communication skills; knowledge of government grant and contract procedures and regulatory affairs; the ability to analyze and critique scientific documents; and the ability to work cooperatively and collaboratively with individuals at all levels. Please send resume, including salary history and requirements, to the ILSI Administrator, 1126 16th St., NW, Washington, DC 20036 or fax to 202-659-3859. EOE/MF

MJ RESEARCH IS A LEADING MANUFACTURER OF LAB PRODUCTS FOR BIOMEDICAL RESEARCH, INCLUDING THERMAL CYCLERS FOR DNA AMPLIFICATION & CYCLE SEQUENCING, AS WELL AS RELATED DISPOSABLE PRODUCTS AND DNA ANALYSIS EQUIPMENT.

The following opportunities are available at
 MJ Research, Inc. 

Scientific Field Sales Representatives (Job Code GM1)

Attention Post Docs! We seek self-motivated, personable and energetic molecular biologists for technical sales opportunities throughout the US. Advanced degree required, prefer PhD in molecular biology or related field. Sales experience not necessary. Exceptional earning potential.

Inside Sales Representatives (Job Code GM2)

Massachusetts-based. Must have an advanced degree with extensive molecular biology experience. Will perform market research, telephone sales, attend conferences, generate leads and provide technical support.

National Sales Manager (Job Code GM3)

Directly manage our North American sales force. Develop training programs. Manage and set sales goals. Must have 5+ years in research product sales and sales management. Advanced degree required, prefer PhD in molecular biology or related field.

Customer Service Representatives (Job Code GM5)

Heavy phone contact with customers. Work closely with sales, marketing and shipping. Data entry and analysis, order entry and processing, customer support, administrative support of sales reps. Massachusetts-based. BA/BS required. Some CS experience preferred. Multilingualism a plus.

MJ RESEARCH OFFERS COMPETITIVE SALARIES AND EXCELLENT BENEFITS. PLEASE VISIT OUR WEBSITE AT WWW.MJR.COM FOR MORE INFORMATION AND OTHER JOB OFFERINGS. INTERESTED CANDIDATES SHOULD SUBMIT A RESUME TO HR DEPARTMENT; MJ RESEARCH, INC.; 590 LINCOLN STREET; WALTHAM MA 02451. Fax to 617-972-8085 OR E-MAIL TO HR@MJR.COM. PLEASE REFERENCE THE APPROPRIATE JOB CODE. ALL CANDIDATES MUST BE ELIGIBLE TO WORK IN THE US WITHOUT A SPONSOR. AA/EOE.

CHAIR

Department of Biological Sciences University of Idaho

The University of Idaho invites applications for the Chair of the Department of Biological Sciences. We are seeking candidates who are leaders of a nationally recognized research program. The Department of Biological Sciences consists of 15 tenure-track faculty with vigorous research programs in a wide variety of biological sciences, but with an emphasis in reproductive and evolutionary biology. This position will include resources for recruiting four tenure-track faculty, funds for renovation of lab space and competitive start-up funds. The chair will be expected to provide leadership to a currently strong department, enhance its Ph.D. and M.S. graduate programs, and complement the major research initiative within the University's Strategic Plan.

The University of Idaho is the State's Land Grant University with over 13,000 students. Strong undergraduate and graduate programs are coupled with nationally recognized research and scholarly activities. There are more than 750 faculty engaged in teaching and research. The University of Idaho is located within minutes of Washington State University and there are active research and teaching collaborations between the two institutions.

Applications will be accepted until September 15, or until a suitable candidate is found, and should consist of a curriculum vitae, personal statements of research and teaching plans, leadership style, and the names of three references. Send to:

**Dr. Michael Laskowski, Chairperson
Biological Sciences Chair Search Committee
Department of Biological Sciences
University of Idaho
Moscow, ID 83844-3051
<http://www.uidaho.edu/LS/BioSc/>**

To enrich education through diversity, the University of Idaho is an equal opportunity / affirmative action employer.



HOWARD HUGHES MEDICAL INSTITUTE

The Howard Hughes Medical Institute conducts biomedical research in the areas of cell biology, genetics, immunology, neuroscience and structural biology at over seventy locations around the United States. HHMI regularly has positions open for research and administrative personnel.

Laboratory Positions:

- Postdoctoral Fellowships
- Research Specialists/Technicians
- Research Secretaries

Administrative Positions:

- Managers
- Administrative Assistants
- Purchasing Coordinators
- Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at **www.hhmi.org/jobs** for a listing of available positions.

Postdoctoral Position Molecular Immunology

An Intramural Research Training Award (IRTA) is available immediately to investigate the molecular mechanisms that underlie the etiology and susceptibility to a number of intraocular inflammatory diseases of infectious or autoimmune origin. Emphasis will be on cytokine-inducible signaling pathways of ocular cells. Prior experience in immunological methods, cell culture, gene regulation, parasitology or virology is desirable. Candidates should have a Ph.D. or M.D. with less than 5 years of postdoctoral experience and must be U.S. citizens or permanent residents. The salary range is from \$27,500-\$38,000 depending on postdoctoral experience. Deadline date to receive applications is August 20, 1999. Send a curriculum vitae and names of three references to:

Charles E. Egwuagu, MPH, Ph.D.,
Laboratory of Immunology
National Eye Institute
National Institutes of Health
Building 10, Room 10N116
10 Center Dr. MCS 1857
Bethesda, Maryland 20892-2730.

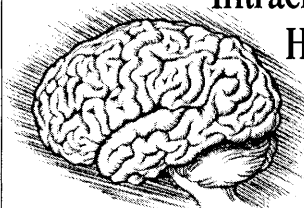
Fax: (301) 480-3914; email: emeka@helix.nih.gov

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

ANNOUNCEMENTS

The National Institute of Mental Health, NIH and
The Alfred E. Mann Institute for Biomedical Engineering

Toward Replacement Parts for the Brain: Intracranial Implantation of Hardware Models of Neural Circuitry



August 12-14, 1999

Willard Inter-Continental Hotel, Washington, DC

This conference will bring together leading researchers throughout the country for a focus on one of the newest frontiers of neuroscientific and bio-engineering research: the intracranial implantation of computer chip models of brain circuitry as neural prosthetics to replace damaged or dysfunctional brain tissue. In considering the development of "replacement parts for the brain," speakers will address recent advances in (i) biologically realistic mathematical models of brain or spinal cord function, (ii) silicon- and/or photonics-based computational devices which incorporate those models, and (iii) "neuron-silicon interface" devices, i.e., micron-scale multi-site electrode arrays to provide bi-directional communication between the computational element and functioning neuronal tissue. The conference is intended to synergize interdisciplinary research in the neural, engineering, and biomedical sciences.

Further information and conference agenda at:

<http://www.usc.edu/dept/biomed/NeuralProstheticsCNF/>

For advanced registration, please contact Mr. Matt Burdetsky at
Capital Meeting Planning, c/o NIMH Conference on Replacement Parts
for the Brain, 3222 Dye Drive, Falls Church, VA 22042
Phone: 703-207-1703; FAX 703-207-1704; E-mail: matt@cmpinc.net



CHALLENGING BIOMEDICAL EMPLOYMENT OPPORTUNITIES DHHS/PHS/FOOD AND DRUG ADMINISTRATION CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

The Center for Biologics Evaluation and Research is searching for outstanding microbiologists, biologists, chemists, and medical technologists to work in areas such as molecular biology, immunology, cell biology, biochemistry, virology, medical technology and genetics. Some positions may involve working with HIV and/or HTLV-I virus. Opportunities for professional development may include further training and attendance at scientific meetings and conferences.

The Center's mission is to regulate blood, vaccines, biological therapeutics and related products according to statutory authorities in order to protect and enhance the public health. The regulation of these products is founded on science and how to ensure their purity, potency, safety, efficacy, and availability. In conjunction with regulation and research responsibilities, the Center statistically evaluates clinical and preclinical studies of human biological products and vaccines and epidemiologically evaluates post-marketing studies and adverse biologics reactions.

Qualifications: These positions require specific course work in the field of study and professional experience or directly related postgraduate education for positions above the entry level. Advanced training and/or experience in one or more of the following areas, is desirable: cell and molecular biology and immunology, virology, cytokines and growth factors or related disciplines. **U.S. Citizenship is required.**

Location: Offices and laboratories are strategically located on the campus of the National Institutes of Health in Bethesda, Maryland, in close proximity to the campus.

Salary: Salary range for GS-5 through GS-11 is \$22,208 to \$52,927 per annum, plus an excellent benefits package and flexible work schedules. Salary and level of responsibility are commensurate with education and experience.

How To Apply: Applications are accepted throughout the year, and candidates should indicate when they will be available for employment. Interested candidates should send an Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), OR a Curriculum Vitae/Resume with bibliography, transcripts, and names of three references to:

Food and Drug Administration
Center for Biologics Evaluation and Research
1401 Rockville Pike, HFM-123
Rockville, Maryland 20852-1448
Attention: Lisa Durphy 99013

FDA IS AN EQUAL OPPORTUNITY EMPLOYER AND HAS A SMOKE FREE ENVIRONMENT

STAFF OR SENIOR SCIENTIST

The Wistar Institute, the nation's oldest independent biomedical research institute, seeks Immunologist with strong T-cell background to join our cancer vaccine program. Candidates must have a M.D., Ph.D. or other post-graduate degree and a minimum of 3 years postdoctoral training.

Please send/e-mail curriculum vitae, publication list, and description of research experience to:

**Human Resources Dept.,
Attn: Dr. Dorothee Herlyn,
The Wistar Institute
3601 Spruce Street,
Philadelphia, PA 19104.
E-mail:
dherlyn@wistar.upenn.edu.**

EOE/AA/
M/F/D/V



UNIVERSITY OF NEW HAMPSHIRE

ASSISTANT PROFESSOR WATER RESOURCES Academic Year Appointment/Search Re-opened

The Department of Natural Resources, University of New Hampshire, is seeking an Assistant Professor in WATER RESOURCES MANAGEMENT (academic year appointment). The Department offers undergraduate degrees in water resources, soils, wildlife, forestry, and environmental conservation as well as a M.S. degree in Natural Resources. There is a strong interdisciplinary, University-wide Ph.D. program in Natural Resources. Additional information about the department can be obtained from our web page (<http://www.unh.edu/natural-resources/index.html>).

Initial teaching responsibilities include 1) Introduction to Water Resources Management and 2) Watershed Hydrology. Two additional courses such as Wetland Management, Contaminant Biogeochemistry, or advanced courses in the candidate's area of expertise will be taught on a staggered, every other year basis for a total of 3 courses (12 credits) per year. Candidates will be expected to interact with colleagues whose interest include ecosystem ecology, stream ecology, biogeochemistry, and soil science; develop a strong, extramurally funded research program; and be actively involved in graduate education. The position is available spring semester 2000. Candidates must have completed all requirements for the Ph.D.



Review of Applications begins September 15, 1999. To apply, send a cover letter, CV, statement of teaching and research interests, and 3 reference letters to: Dr. William H. McDowell, Chair, Water Resources Search Committee, Department of Natural Resources, UNH, Durham, NH 03824

UNH is strongly committed to achieving excellence through cultural diversity. The University actively encourages applications and nomination of women, persons of color, and members of other underrepresented groups, including the disabled.

Clinical Research Fellows

Cato Research Ltd. (CRL) is a contract research organization in **Research Triangle Park, North Carolina** which engages in pharmaceutical drug development and FDA registration on behalf of clients in the pharmaceutical and biotechnology industries. We have exciting *non-laboratory* opportunities for self-starters with scientific backgrounds who want to learn and grow in a creative environment. These individuals will receive training in the scientific, regulatory, medical and financial aspects of pharmaceutical drug development.

The ideal candidates will possess:

- ▼ Ph.D. in Biological Sciences (Toxicology, CMC, Cardiology, Blood Products, Gastrology, Endocrinology, Immunology or Physiology preferred).
- ▼ Excellent written and verbal communication skills.
- ▼ Initiative and strong interpersonal skills.
- ▼ Ability for critical and analytical thinking.

Cato Research Ltd. offers a complete salary and benefits package, and a creative, family-friendly environment in which to grow. For consideration, please send your resume, cover letter and writing sample to: **Job 900, Cato Research Ltd., 200 Westpark Corporate Center, 4364 S. Alston Ave., Durham, NC 27713-2280.** No phone calls please. EOE. Please visit our website at www.cato.com

CATO
RESEARCH



THE ART OF DISCOVERY.

THE SCIENCE OF LIFE.

What if you could be on the threshold of some of the greatest scientific advances of our time, developing new treatments for cancer, AIDS and other serious diseases? At Agouron Pharmaceuticals, you can. Agouron is a fully integrated pharmaceutical company in La Jolla, CA, providing opportunities from Research to Commercial Affairs. We encourage and promote creativity, innovation and leadership in each individual. If you enjoy both autonomy and collaboration in a dynamic environment, consider joining our team in the following area:

DIRECTOR, PROTEIN EXPRESSION, BIOCHEMISTRY

We have an immediate opening for a Director of Protein Expression. We are seeking an individual with an excellent research record and with strong expertise in molecular biology and biochemistry. The successful candidate will play a key role in new programs in our expanding drug discovery pipeline.

The overall responsibility includes leading and managing a large group of Ph.D. and M.S./B.S. level scientists in a multidisciplinary environment responsible for target gene cloning and mutagenesis, and protein expression in bacterial, insect and mammalian cell systems. In addition, the successful candidate will manage the group's efforts in the fermentation facility, and recombinant protein purification for structural studies and high-throughput screening.

A Ph.D. in Molecular Biology, Biochemistry, or a related discipline is preferred. Demonstrated abilities in research management, and a desire to work in an energetic and fast-paced environment are essential. Code 135/ZH

If you have a desire to deliver promising therapeutics to the people who need them most, submit your resume referencing code to:
Agouron Pharmaceuticals, Inc., Code (see above), 3301 N. Torrey Pines Ct., La Jolla, CA 92037; email: jobs@agouron.com. EOE



www.agouron.com

Providing Innovative Technologies To Help All People Live Healthy Lives

Becton Dickinson is a worldwide medical technology company that manufactures and sells a broad range of medical supplies, devices and diagnostic systems for use by health care professionals, medical research institutions and the general public.

Supporting Becton Dickinson's mission to help all people live healthy lives, a major initiative in Drug Delivery research is underway at Becton Dickinson Technologies, located in Research Triangle Park, North Carolina. This program is dedicated to the development of innovative, new drug delivery systems. We are searching for motivated, talented individuals with skills in drug delivery and the pharmaceutical sciences who wish to contribute to the development of medical products that will benefit people throughout the world.

Technology Analyst—Pulmonary

This position, reporting to the Director of Drug Delivery Research, will be responsible for providing technical guidance to the Business Units and Advanced Drug Delivery in the field of Pulmonary Drug Delivery. Responsibilities will include monitoring and reporting business and technology developments in pulmonary drug development; evaluating patents and other intellectual property in the field of aerosol delivery; and providing strategic guidance through knowledge of the pharmaceutical pipeline.

Requires a B.S. or higher in Biological Sciences, Engineering or Business. Technical experience in the fields of pulmonary drug delivery and/or medical devices is required. Understanding of patent law and language is required. Pharma or Drug Delivery business-related experience is preferred in either business development, marketing or sales.

Technology Analyst—Microdevices

This position, reporting to the Director of Drug Delivery Research, will be responsible for providing technical guidance to the Business Units and Advanced Drug Delivery in the field of MEMS microdevices, with special attention to drug delivery and diagnostics. Responsibilities will include monitoring and reporting business and technology developments in microelectromechanical systems, microelectronics, microfabrication and nanotechnology which impact drug delivery and/or diagnostics; evaluating patents and other intellectual property in the fields of MEMS microdesign and microfabrication; and providing strategic guidance to company businesses by developing and maintaining expertise in emerging microelectronic technologies that impact diagnostics and drug delivery.

Position requires a B.S. or higher in Mechanical, Chemical or Electrical Engineering. Technical experience in the fields of MEMS or microelectronics is required. Understanding of patent law and patent language is required. Business experience is preferred in business development, marketing or sales.

Becton Dickinson is located in North Carolina's progressive Research Triangle, selected by Money magazine as one of the best places to live in America. Within a few hours drive, Triangle residents can enjoy the beautiful coast of North Carolina or the majestic Blue Ridge Mountains. We provide competitive salaries and comprehensive benefits. Please forward your resume to: **Becton Dickinson Technologies, 21 Davis Dr., P.O. Box 12016, Research Triangle Park, NC 27709**, or e-mail to BDRChr@bdr.becton.com Becton Dickinson is an equal opportunity/affirmative action employer.

Visit our web site at www.bd.com

**BECTON
DICKINSON**



Professor and Head
Department of Pharmacology and
Experimental Therapeutics
Louisiana State University Medical Center
New Orleans

Louisiana State University Medical Center in New Orleans invites applications and nominations for an anticipated vacancy for Professor and Head of the Department of Pharmacology and Experimental Therapeutics. The appointed candidate will be responsible for directing the Department's activities in education, service, and research. The Department has teaching responsibilities in the Schools of Allied Health, Dentistry, Graduate Studies, Medicine, and Nursing. The Department's web site can be visited at <http://www.lsumc.edu/campus/phar/pharinfo.htm>. Applicants must have a doctoral degree and a minimum of 10 years experience in teaching and research. Candidates should provide a curriculum vitae including a full list of publications, past and current research support, and a brief statement of educational and administrative interests. The candidates should have these materials and three letters of evaluation forwarded to:

Robert Roskoski, Jr.
Chair, Pharmacology Search Committee
LSU Medical Center
1100 Florida Ave., Box 129
New Orleans, LA 70119

LSUMC is an Equal Opportunity/Affirmative Action Employer.
 Women and underrepresented minority candidates are encouraged to apply.

Extraordinary People. Extraordinary Science.

Since 1990, the Whitehead Institute for Biomedical Research has ranked among the top three research institutions in the world in genetics and molecular biology. As an integral part of the MIT teaching community, we attract the brightest scientists with promising research agendas, and then give them the freedom to pursue their own dreams. The results are nothing short of extraordinary. Join us.

Biocomputing Applications Specialist

We are looking for an energetic, innovative, computer savvy biologist to support scientists at the Whitehead Institute in the use of molecular biology software for Macintosh and UNIX systems. The Whitehead Institute is a world-renowned basic research Institute with 20 independent research laboratories. Responsibilities of the Specialist include recommending, supporting and installing software; instructing scientists in the use of DNASTar Lasergene, MacVector, GCG and similar programs; maintaining and administering a Web Server for biocomputing; and assisting scientists in developing genomic databases and analyzing gene expression and biological sequence data. Requires a minimum of an MS degree in Biology or related discipline or equivalent experience and a minimum of one to two years of related experience. Must be flexible and demonstrate good interpersonal skills, and have a background in utility programming (C Shell, Perl) in a UNIX environment.

We offer excellent salaries, generous benefits (including tuition reimbursement and T-pass discount), interaction with MIT community, state-of-the-art research facilities, and a convenient Kendall Square location.

Please send resumes to: Whitehead Institute for Biomedical Research, Human Resources Dept. Ref. SC:7999, Nine Cambridge Center, Cambridge, MA 02142. Equal Opportunity Employer.

We have many more Administrative, Computing, and Research opportunities.

Visit our web site: www.wi.mit.edu.



Ontogen, founded in 1992, is currently a privately held company which has established itself as a leader in the rapidly developing field of automated organic synthesis directed at drug discovery. Utilizing its strong resources in engineering, chemistry, biology, and information sciences, the company's mission is to discover and develop small molecule therapeutics from its rapidly expanding small molecule libraries. The company currently has three substantial corporate partnerships in addition to in-house discovery projects. One successful internal oncology project has led to the identification and optimization of a P-glycoprotein inhibitor, directed at multidrug resistance, which has now progressed through early clinical trials.

Principal/Research Scientist and Research Associate

Ontogen Corporation currently has openings for a highly qualified Principal or Research Scientist and Research Associate in the biological sciences group. The successful Principal/Research Scientist candidate will develop and run high-throughput primary and secondary assays for small molecule therapeutics in the fields of oncology, inflammation and diabetes. Requirements include a Ph.D. with post-doctoral experience in a biological science, plus 2 or more years' biotechnology or pharmaceutical company experience in drug discovery. Strong molecular biology skills and experience in signal transduction are also required. The successful Research Associate candidate will assist in all aspects of the drug discovery process. Requirements are a Bachelor's degree in Biology plus 2 or more years' relevant experience. Good communication skills and the ability to work in a multi-disciplinary team environment are essential for all positions.

Ontogen is located in state-of-the-art facilities in Carlsbad, just north of San Diego. The company offers competitive compensation and benefits packages, including a stock option plan. Interested candidates should send, email, or fax a resume to: **Human Resources, Job Code: BRP/scia, Ontogen Corporation, 6451 El Camino Real, Carlsbad, CA 92009; email: hr@ontogen.com; fax: (760) 930-0200.**

Ontogen Corporation
www.ontogen.com

The Hospital for Sick Children is a health care, teaching and research centre dedicated exclusively to children; affiliated with the University of Toronto.

CARDIOVASCULAR DEVELOPMENTAL BIOLOGIST/MOLECULAR GENETICIST

The Interdisciplinary Program in Cardiovascular Research of the Research Institute at The Hospital for Sick Children, in conjunction with the Program in Developmental Biology has a position available for an outstanding M.D., Ph.D., or M.D. Ph.D., scientist. We seek an individual who uses genetic and molecular methods in humans, mammalian, vertebrate or invertebrate models to study cardiovascular development and susceptibility to cardiovascular diseases. The Research Institute and the University of Toronto are devoting considerable resources to state-of-the-art facilities dedicated to bioinformatics, genomics and proteomics, as well as imaging and physiologic monitoring of transgenic mice. The successful candidate will be cross-appointed at Assistant, Associate or full Professor level to an appropriate department at the University of Toronto.

Please submit a curriculum vitae, reprints of three to five recent publications, a statement of research and future directions, along with the names, addresses, telephone, fax and email addresses of three referees by September 15, 1999, to: Dr. Marlene Rabinovitch, The Hospital for Sick Children, 555 University Avenue, Toronto, ON M5G 1X8 Canada. Fax (416) 813-7480. The University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian immigration requirements, this advertisement is directed firstly to Canadian citizens and permanent residents.



THE HOSPITAL
FOR SICK CHILDREN



University of Toronto

**National Cancer Institute
Division of Clinical Sciences
Radiation Oncology Sciences Program
Radiation Oncology Branch**

The Radiation Oncology Branch (ROB) of the Radiation Oncology Sciences Program (ROSP) at the National Cancer Institute is conducting a search for a tenure-level or tenure track investigator to initiate independent research in the molecular and cellular biology of ionizing radiation. The Branch is dedicated to the multi-disciplinary care of the cancer patient, allied to an active clinical and laboratory research effort. We are seeking an imaginative and ambitious individual committed to advancing the research and clinical programs of the field of radiation oncology. This is a unique position allowing the individual to conduct independent research in a team environment of clinicians and scientists dedicated to translating novel and pertinent laboratory findings into clinical trials. The successful candidate will be senior member of the ROSP, which also includes the Radiation Biology Branch and Radiation Research Program.

This position has an annual salary between \$60,000-\$120,000 depending upon the applicant's qualifications. All applications should include the following: a letter expressing interest in the position; a statement of research and clinical interests; a career synopsis and brief bibliography; a current curriculum vitae and complete bibliography; and the names and addresses of five references. A list of the requirements or additional information about the position may be obtained by contacting Nancy Kesteven at the address listed below. To ensure full consideration, applications must be completed by **September 30, 1999**.

Applications should be sent to :

**Ms. Nancy Kesteven
Building 10, Rm B3-B69
Radiation Oncology Branch
National Cancer Institute, National Institutes of Health
9000 Rockville Pike, Bethesda, MD 20892-1002
Telephone: (301) 496-5457, Fax: (301) 480-5439**

Selection for the position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

**National Cancer Institute
Division of Clinical Sciences
Radiation Oncology Sciences Program
Radiation Oncology Branch**

The Radiation Oncology Branch (ROB) of the Radiation Oncology Sciences Program (ROSP) of the National Cancer Institute, National Institutes of Health is accepting applications from senior candidates for a tenure track investigator clinician. This is a unique opportunity in assisting the ROB develop new areas of clinical and translational research in radiation therapy, radiation physics, radiation biology, radioimmunology and molecular and cell biology. This position involves clinical care, clinical and laboratory studies, supervising junior investigators, training residents/fellows and working effectively in a team environment. We are seeking an individual committed to advancing the research and clinical programs of the field of radiation oncology. The successful candidate will be a senior member of ROSP, which also includes the Radiation Biology Branch, Radiation Research Program and other collaborators.

This position has an annual salary between \$125,000 to \$175,000 depending upon the applicant's qualifications. All applications should include the following: a letter expressing interest in the position; a statement of research and clinical interests; a career synopsis and brief bibliography; a current curriculum vitae including complete bibliography; and the names and addresses of five references. A list of the requirements or additional information about the position may be obtained by contacting Nancy Kesteven at the address listed below. To ensure full consideration, applications must be completed by **September 30, 1999**.

Applications should be sent to :

**Ms. Nancy Kesteven
Building 10, Rm B3B69
National Cancer Institute, National Institutes of Health
9000 Rockville Pike, Bethesda, MD 20892-1002
Telephone: (301) 496-5457 FAX (301) 480-5439**

Selection for the position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

GENE THERAPY PROGRAM INDIANA UNIVERSITY SCHOOL OF MEDICINE

Several postdoctoral and predoctoral positions, supported in part by an NIH Training Grant, are available immediately to pursue basic research on molecular and cellular biology, and immunology of gene therapy. A well-integrated multidisciplinary program involving the following preceptors and their research areas is as follows:

Janice S. Blum, Ph.D. (Immune Regulation; Immunodeficiencies; Autoimmunity) **Hal E. Broxmeyer, Ph.D.** (Stem Cells; Hematopoiesis; Gene Therapy of Blood Diseases) **D. Wade Clapp, M.D.** (Hematopoiesis; Gene Therapy of Fanconi Anemia) **Kenneth Cornetta, M.D.** (Bone Marrow Transplantation; Gene Therapy of Cancer) **Mary C. Dinauer, M.D., Ph.D.** (Gene Therapy of Chronic Granulomatous Disease) **David B. Donner, Ph.D.** (Tumor-Host Interactions; Signal Transduction; Gene Regulation) **Leonard C. Erickson, Ph.D.** (Modulation of Drug Resistance in Human Tumors) **Gen-Sheng Feng, Ph.D.** (Tyrosine Phosphatases in Cell Differentiation, Migration and Death) **Robert A. Hromas, M.D.** (Hematopoiesis; Transcription Factors; Leukemia) **Mark R. Kelley, Ph.D.** (Eukaryotic DNA Repair; Gene Therapy With Repair Genes) **Michael J. Klemsz, Ph.D.** (Gene Expression; Ets-domain; Transcription Factors) **Suk-Hee Lee, Ph.D.** (Cell Cycle Control and Regulation of DNA Metabolism) **Ann Roman, Ph.D.** (Gene Expression; Oncoproteins; Human Papillomavirus Pathogenesis) **Franklin O. Smith, M.D.** (Umbilical Cord Blood Transplantation; Gene Therapy) **Arun Srivastava, Ph.D.** (Parvoviruses AAV and B19; Parvovirus Vectors for Gene Therapy) **Edward F. Srour, Ph.D.** (Stem Cell Biology; Experimental Hematopoiesis; Flow Cytometry) **David A. Williams, M.D.** (Hematopoietic Microenvironment; Gene Therapy of Blood Diseases) **Jian-Ting Zhang, Ph.D.** (Multidrug Resistance in Cancer; Membrane Transport Proteins)

Please send a statement of your research experience and goals, curriculum vitae, and names and addresses of three references to: **Janis Stringer, Administrative Assistant, Department of Microbiology and Immunology, Indiana University School of Medicine, Medical Science Building 255, 635 Barnhill Drive, Indianapolis, IN 46202-5120.** For further information, please visit the following Websites: <http://www.iupui.edu/it/micro/dept.html>; <http://www.iupui.edu/~woc/>; <http://www.iupui.edu/~wellsctr/>. *Indiana University is an Affirmative Action/Equal Opportunity Employer.*

Molecular Genetics and Transgenic Pathobiology Faculty Positions The Ohio State University

The Ohio State University, Department of Veterinary Biosciences, is seeking two tenure-track faculty positions in comparative molecular genetics and transgenic animal pathobiology, respectively, at the assistant/associate professor level. The college is a member of the most comprehensive health sciences center in America. Among other resources, The Ohio State University has an NIH-designated Comprehensive Cancer Center, two campuswide transgenic animal facilities, the Center for Retrovirus Research, and campuswide graduate education programs in genetics and molecular life sciences. Departmental support facilities include BSL-3 containment laboratories, recently renovated research laboratories, and a state-of-the-art flow cytometry facility. Applicants (see description below) should have completed a PhD degree or equivalent, relevant postdoctoral experience, and have a record of excellence in research. More senior candidates should have a proven record of success in attracting extramural research funds; junior candidates should have excellent potential. Development of an independent research program, involvement in collaborative campuswide research efforts, and a strong commitment to graduate education are essential.

Applications should include a curriculum vitae, statement of career goals, summary of current research activities and the names of at least four individuals from whom letters of reference may be solicited. Academic rank and salary are negotiable. Applications will be accepted until November 15, 1999 or until the positions are filled. Address all correspondence to: **Dr. Steven Krakowka, Chairman, Search Committee, Department of Veterinary Biosciences, College of Veterinary Medicine, The Ohio State University, 1925 Coffey Road, Columbus, OH 43210.**

Comparative Molecular Geneticist. A person is sought with education and experience in mammalian molecular genetics. Applicants should have knowledge and expertise in genomic mapping, genetic models of cancer, genetic basis of disease, gene therapy or molecular oncology.

Transgenic Animal Pathobiologist. A person is sought with education and experience in murine pathobiology or an equivalent field with knowledge in the phenotypic expression of disease in genetically engineered murine models of human and animal diseases. Advanced professional education in veterinary pathology and transgenic animal biology is desirable. Applicants will be encouraged to participate in training grants and other University-wide initiatives in transgenic research.

The Ohio State University is an EO/AA employer. Women, Minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

THE UNIVERSITY OF CALIFORNIA, SAN DIEGO DEPARTMENT OF BIOLOGY



The Department of Biology at UCSD has a large faculty spanning many areas of biological science and one of the largest and most diverse graduate programs in the country. We invite applications for faculty positions in

NEUROBIOLOGY

We plan to make appointments in several of the many areas of neurobiology, including systems and integrative, computational, and behavioral neurobiology, and genetic, molecular, cellular, and developmental neurobiology. There is a strong preference for the Assistant Professorial (tenure-track) level, but applicants with all levels of experience from Assistant Professor to Full Professor (tenured) will be considered. Candidates must have a Ph.D. or equivalent degree. The positions will involve the development of rigorous research programs supported by extramural funds and the teaching of undergraduate and graduate students. Salary will be commensurate with level of appointment and based on the UC salary scale.

Applications received by September 1, 1999, will be assured of consideration. Send a letter of application including a curriculum vitae, a complete list of publications, a brief description of research interests and professional goals, and the names, addresses, email addresses, phone and fax numbers of at least three references to: **Neurobiology Search Committee, Department of Biology 0346, University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093-0346.**

All positions are contingent on funding becoming available. UCSD is an equal opportunity/affirmative action employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

Professor and Director Vascular Biology Research Group

Albany Medical College announces the availability of a tenure-track, senior position as Professor (or Associate Professor) with responsibility to provide leadership to an Interdisciplinary Vascular Biology Research Program. Scientists with a Ph.D., M.D., or M.D./Ph.D. currently at the Associate Professor or Professor level are invited to apply. Applicants must have a record of research excellence, NIH funding, and experience in mentoring graduate students or postdoctoral fellows. Candidates should have a background in either cardiovascular physiology, pharmacology, or experimental pathology. Research interest in cardiopulmonary disease or vascular wall pathology using cellular and molecular approaches would be of special interest. Academic appointment can be in a basic science and/or clinical department. Successful candidate will have limited teaching and/or clinical responsibilities defined by their own personal interest.

Expansion of the College's research programs coincides with the Medical Center's new Strategic Research Plan to develop interdisciplinary research and training programs which emphasize Neurosciences, Infectious Disease & Immunology, Cell & Molecular Biology and Vascular Biology. Interdisciplinary Programs are coordinated by two interactive Directors. Alignment of the Vascular Biology research programs with the Clinical Centers in Heart and Vascular Diseases is projected.

Research interests of current Vascular Biology faculty include vascular smooth muscle cell signaling, endothelial barrier integrity, hypertension, vascular reactivity, coronary disease, ischemia-reperfusion injury, nitric oxide, pulmonary edema, and inflammatory lung disease. Additional tenure-track Assistant Professor faculty positions are budgeted to build the Vascular Biology program.

Applicants should submit curriculum vitae to: **Dr. Thomas M. Saba, Senior Vice President for Research, Professor & Chair, Physiology & Cell Biology, Albany Medical College, Mail Code 134, 47 New Scotland Avenue, Albany, NY 12208.**

An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR TOXICOLOGY

St. John's University, one of the largest Catholic universities in the U.S., invites applications for the tenure-track position of Assistant/Associate Professor of Toxicology in the Department of Pharmaceutical Sciences, College of Pharmacy and Health Professions. Applicants must possess a Ph.D. and postdoctoral experience in toxicology or a closely related field. Responsibilities include teaching undergraduate and graduate courses in toxicology and allied health, establishment of an active research program and mentoring graduate students in toxicology. The department possesses excellent facilities and support services for research. Application letters with curriculum vitae, statement of research interests and names of three references should be sent to: **Dr. Louis Trombetta, Professor and Chair, Department of Pharmaceutical Sciences, St. John's University, 8000 Utopia Parkway, Jamaica, NY 11439**



St. John's is an equal opportunity employer and encourages applications from women and minorities.

Marketing and Sales Research Scientists

Ciphergen Biosystems, Inc. is currently expanding its US operations and looking for ambitious, commercially-minded Ph.D. Biochemists and Biologists with excellent communication skills and proven problem solving abilities, at the following locations: Chicago (or Central to Chicago), New Jersey, New York, Austin, Houston or Dallas, TX.

Requirements: Preferably you will have experience in biology and biochemistry research, including gene expression and protein purification. Expertise with one or more of the following areas is highly desirable:

- Drug discovery and development
- Molecular immunology/virology/microbiology/toxicology/cell biology
- Protein biochemistry
- Immunoassay development

Responsibilities: Your role will involve working alongside our clients' scientists, in both industry and academia, developing new protocols and rapidly solving important biological problems using Ciphergen's proprietary SELDI ProteinChip™ technology.

As well as being a talented scientist, capable of strong analytical thinking and creativity, you will need good leadership and interactive skills as well as the ability to communicate effectively at all levels. The positions involve moderate travel.

Contact: Human Resources, Fax: 650-424-1651.

Email: cv@ciphergen.com

TENURE-TRACK POSITION IN DEVELOPMENTAL SKIN BIOLOGY



NIAMS, NIH

The Laboratory of Skin Biology, Intramural Research Program (IRP) of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) of the National Institutes of Health (NIH) in Bethesda, Maryland has an opening for a tenure-track scientist to direct an independent research program on the developmental biology of the epidermis. The successful candidate will be provided the resources needed for a vigorous program, including defined space and fellow support. Candidates should have demonstrated credentials in developmental biology and skin biology. We are particularly interested in a scientist who uses multi-disciplinary approaches to the study of skin biology, with emphasis on transgenic and knockout mice.

Candidates should have a Ph.D. and/or M.D. as well as advanced training in developmental biology and skin biology. We are seeking to recruit an individual who shows promise in pursuing an independent research program which can take advantage of interactions with existing members of the LSB group working in the areas of epidermal biochemistry, molecular biology and genetic diseases of cornification, as well as with other scientists within the NIAMS IRP and the NIH campus as a whole.

Competitive salary and benefit packages are available. Please forward a C.V., bibliography, list of 5 most important publications, copies of 2 most significant papers, a brief statement of future research (1-2 pages), and 3 letters of reference to:

Linda Peterson
Secretary to Scientific Director
NIAMS, NIH
Building 10, Room 9N228
9000 Rockville Pike
Bethesda, MD 20892-1820

CLOSING DATE: AUGUST 15, 1999

ANNOUNCEMENTS

DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW?

"I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact."

"I was always tinkering with my toys, taking them apart, trying to fit the square peg in the round hole. NIH is the only place to be for cutting-edge training, creativity, and pure excitement."

Has your interest always been to pursue medical research? Do the realities of staggering educational debt appear to prevent you from realizing your dreams? NIH offers a variety of clinical and basic science postdoctoral training fellowships that can be combined with educational loan repayment incentives. You owe it to yourself to know about these programs (or share the information with someone in need!) as you make your career decisions. You owe it to yourself to learn more about what NIH can do for you.

NIH Loan Repayment Benefits of \$35,000 per Year

NIH, the world's leading biomedical research facility, has trained thousands of qualified students in neuroscience, pathology, immunology, molecular genetics, developmental biology, cell biology, molecular biology, virology, and structural biology, to name only a few areas in our intramural research program.



For more information on the Loan Repayment Program and postdoctoral training, visit our websites at:

**<http://www.training.nih.gov> and
<http://lrp.info.nih.gov>**

Toll Free: 1-800-528-7689 • TTY: 1-888-352-3001



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

BURROUGHS WELLCOME FUND

Awards provide scientists early in their careers with \$210,000 to support basic research.

Open to U.S. and Canadian scientists.

The application deadline for the 2000 award series is November 1, 1999.

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

4709 Creekstone Drive, Suite 100
Durham, NC 27703-8472
Tel (919) 991-5100 Fax (919) 941-5884
E-mail: info@bwfund.org
Website: <http://www.bwfund.org>

NEW INVESTIGATOR AWARDS IN THE PHARMACOLOGICAL OR TOXICOLOGICAL SCIENCES

These awards, which provide \$70,000 per year for three years, are intended to foster the career development of researchers who will bring new approaches and novel thinking to pharmacology or toxicology. Candidates have considerable flexibility in proposing research activities. BWF encourages candidates to define these fields in the broadest terms, so long as the research has application to either the pharmacological or toxicological sciences. It is anticipated that up to a total of 10 awards will be made.

Candidates must be U.S. or Canadian citizens or permanent residents, have an M.D. or Ph.D. degree, and be independent investigators appointed within three years of the November 1 application deadline to a tenure-track position as an assistant professor or its equivalent. Candidates need not hold appointments in pharmacology or toxicology. BWF encourages applications from researchers in such diverse departments and fields as biochemistry, genetics, molecular biology, and the physical and computational sciences. Clinical and veterinary scientists engaged in fundamental research also may apply.

ADDITIONAL BWF AWARD PROGRAMS FOR BIOMEDICAL SCIENTISTS

Career Awards in the Biomedical Sciences provide approximately \$500,000 over four to six years to bridge postdoctoral training and initial faculty appointment (application deadline: October 1). Awards in molecular parasitology, malaria, and molecular pathogenic mycology provide two to five years of support (deadline: January 18, 2000). Research Travel Grants provide support for scientists and medical historians to spend brief periods—from two weeks to six months—in the United Kingdom or the Republic of Ireland to participate in collaborative research projects or in training projects to acquire new research techniques (three deadlines per year: March 1, July 1, and November 1.)

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

BIOMEDICAL
RESEARCH FUNDING



Postdoctoral Research Positions Available Cell Cycle Research and Cancer

The laboratories of Charles J. Sherr, M.D., Ph.D., and Martine F. Roussel, Ph.D. have two immediate openings for postdoctoral fellows interested in studying cell cycle dynamics and cancer. Ongoing projects emphasize control of the G1 to S phase transition in mammalian cells with current investigations centering on the ARF tumor suppressor, cyclin D-dependent kinases, and CDK inhibitors of both the Cip/Kip and INK4 gene families. Descriptions and lists of publications from the laboratory can be found at www.stjude.org. Experience in molecular biology, protein and nucleic acid biochemistry, cell culture, and genetic manipulation in mice would be particularly helpful to prospective candidates. Competitive salaries, benefits, and access to state-of-the-art research facilities will be provided. Qualified applicants must hold a Ph.D., M.D./Ph.D. or M.D. degree, or must now be completing a graduate program. Please send curriculum vitae, a brief summary of research interests, and names and addresses of three references to either:

Charles J. Sherr, M.D., Ph.D. or Martine F. Roussel, Ph.D.
Department of Tumor Cell Biology
St. Jude Children's Research Hospital
332 N. Lauderdale
Memphis, TN 38105

St. Jude Children's Research Hospital is an equal opportunity employer.

Postdoctoral Fellowships

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1999–2000 in its training program, now in its 24th year, for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, tumor immunology, and research that interfaces with clinical and physical sciences. Training is available in DNA repair, replication, and mutagenesis; regulation of cellular proliferation and differentiation including growth factors, signal transduction pathways, and intercellular communication; molecular immunology; molecular genetics and epidemiology of cancer; and human disease models and gene therapy. Unique training resources and core facilities are supported by the NCI-designated UNC Lineberger Comprehensive Cancer Center.

Preceptors are: **Steven Bachenheimer, Albert Baldwin, Victoria Bautch, David Brenner, Keith Burrage, Sharon Campbell, Stephen Chaney, David Clemmons, Edward Collins, Marila Cordeiro-Stone, Channing Der, Robert Duronio, H. Shelton Earp, Jeffrey Frelinger, Frank French, Jack Griffith, Eng-Shang Huang, Clyde Hutchinson III, Kenneth Jacobson, Rudolph Juliano, David Kaufman, Shannon Kenney, Ryszard Kole, Steven Leadon, David Lee, Patricia Maness-Tidwell, William Marzluff, Beverly Mitchell, Joseph Pagano, Tom Petes, Mark Peifer, Nancy Raab-Traub, James Raleigh, Dale Ramsdell, R. Jude Samulski, Aziz Sancar, Ronald Swanstorm, Lishan Su, Holden Thorp, Jenny Ting, Ronald Thurman, Michael Topal, Terry Van Dyke, Jean-Michel Vos, Kevin Weeks, Bernard Weissman, Elizabeth Wilson, and Yue Xiong.**

Candidates must be U.S. citizens or permanent residents. For an informational brochure or to apply (include curriculum vitae, three letters of recommendation, a statement of research interests, and graduate school records) write to:

Joseph S. Pagano, M.D.
CB# 7295
UNC Lineberger Comprehensive Cancer Center
School of Medicine
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7295

UNC's Comprehensive Cancer Center is an Affirmative Action/Equal Opportunity Employer. Minority applicants are encouraged to identify themselves voluntarily.

Because of you

we're making a world of difference.



At Wyeth-Ayerst, we're leading the way for a healthier world in the following areas:

- Women's Health
- Central Nervous System Disorders
- Oncology/Immunology
- Infectious Diseases
- Tissue Growth & Repair
- Hematology

Wyeth-Ayerst is committed to helping people lead healthier lives through the development of innovative pharmaceutical, vaccine and nutritional products. We achieve this through our superior research, manufacturing, sales and marketing capabilities.

Enjoy the freedom to develop your own career while having the support of a valuable team. We employ the best in the business, so you're surrounded with the knowledge you need to achieve your individual goals.

To find out more about opportunities available in our Radnor/Marietta, PA; Princeton/Cherry Hill, NJ; Richmond, VA; Sanford, NC; Chazy/Rouses Point/Rochester and Pearl River, NY facilities, please send your resume to: Wyeth-Ayerst, Reference OPSCI-0799, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax in fine mode to: (610) 989-4854. Email: jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume) For more information, visit our website at www.ahp.com/wyeth.htm

To find out more about opportunities in our Genetics Institute Cambridge and Andover, MA facilities, please visit our website at: www.genetics.com

Principals only. Equal Opportunity Employer. M/F/D/V

**WYETH
AYERST**

A division of American Home Products

Bringing results home.

BIOGNOSIS

Biognosis U.S., Inc. is a biotechnology company founded in early 1999 focused on human behavior genetics and translational research with university and industry partners. Biognosis will be hiring individuals interested in working in an entrepreneurial environment with academic qualifications at the BS, MS and PhD levels. Industry experience is an asset, but not required. Positions are available in bioinformatics, computer science, molecular biology and science writing.

Bioinformatics — Staff scientist with experience in nucleic acid and protein sequence analysis, sequence assembly and phylogenetic analysis, sequence variant and sequence motif analysis, PCR primer and vector design and methods of genetic linkage, and linkage disequilibrium analysis. Requires Ph.D. in molecular biology, genetics or computer science with a publication record.

Computer science — Staff scientists with experience in systems administration and/or relational or object-oriented database construction, including web-based script programming and GUI design for data entry, tracking and analysis. Experience in laboratory or workplace automation, multiple operating systems, integration of work-flow, instrument data capture and C++ programming would be a distinct advantage. BS in computer science/biomedical engineering/mathematics with work experience or M.S. in genetics/molecular biology with equivalent programming/computing experience required.

Molecular biology — Research associates with experience in molecular genetic and molecular immunological techniques to perform nucleic acid and protein extraction and analysis. Bachelor's degree with experience in several of PCR, PCR product analysis, sequencing, cloning, immunohistochemistry, two-hybrid screens, protein expression, tissue preparation, staining and image analysis required.

Science writing — Research associate with experience in biomedical literature analysis to assist in the preparation of grant applications and the scientific management of contracts from both internal and public sources. Excellent communication skills and writing samples required.

Please submit resumes to **Andrew W. Bergen, Ph.D., Laboratory Director**, Biognosis U.S., Inc. 3 Bethesda Metro Center, Suite 700, Bethesda, MD 20814, (301) 961-1928, (301) 657-9776 fax, abergen@anide.com

Health Scientist Administrator/Medical Officer GS-601/602-13/14; Salary \$58,027-\$93,233; Announcement Number: NHLBI-99-0072B, Closes 8/17/99; Call NIH Fax Number: 301-594-2953; Request Fax ID: 4029

This position is located in the Bioengineering Scientific Research Group (SRG) in the Heart Research Program, Division of Heart and Vascular Diseases, National Heart, Lung & Blood Institute, NIH in Bethesda, Maryland. Bioengineering is an interdisciplinary field that applies engineering theory and practice to the advancement of knowledge at the genetic, molecular, cellular, tissue, and organ levels; to the development of new and novel biologicals, materials, processes, devices, and imaging systems for meeting the mission of the Division and Institute. The Bioengineering Research Group utilizes a variety of mechanisms of support to administer a broad research portfolio including innovative ventricular assist systems, implantable total artificial hearts, genetically enhanced cardiovascular implants, invasive and noninvasive imaging of physiologic, metabolic, and physical properties of normal and diseased tissues, micromechanics, self-assembly, magnetic resonance angiography, physical stress and strain, micromechanics, self-assembly, mathematical models and simulation, biomaterials and tissue engineering, and therapeutic devices.

The incumbent will: 1) Serve as a member of the Bioengineering Scientific Research Group (BSRG); 2) Serve as an Advisor to the SRG Leader and to the Program Director in the Heart Research Program, DHVD; 3) Be responsible for the management of a research portfolio; 4) Make recommendations to the SRG Leader and the Program Director regarding policy formulation, scientific directions and funding; and 5) Participate in a cooperative effort to accomplish goals of the Program, Division and Institute. Selective Factor. Scientific knowledge and expertise in medical and biological imaging, bioengineering, applied physics and mathematics KSAs. 1) Scientific knowledge and expertise in cardiovascular medicine, diagnostics and therapeutics. 2) Ability to manage a research project. 3) Ability to evaluate and analyze broad scientific areas. 4) Ability to communicate orally and in writing with co-workers and the community outside the organization.

Submission of KSAs is strongly encouraged.

Applications must be postmarked no later than 8/17/99.
Submit to: **Attention: Connie Lucas (LCP)**

NHLBI-99-0072B

**National Institutes of Health
NHLBI Human Resources Office
31 Center Drive MSC 2484
Bldg 31 Room 5A28
Bethesda, MD 20892-2484**

finding

solutions

improving
lives

Regeneron Pharmaceuticals is a trailblazer in molecular and cell biology research. We provide top scientists with the resources and tools they need to tackle and cure life-threatening diseases. We seek committed, talented professionals to join our exceptional team as we take on new challenges and discover new solutions. Excellent opportunities exist in the following areas:

Program Coordinators

We currently have a number of positions for dynamic individuals in our Research and Preclinical Program

Management Groups. Responsibilities of these administrative positions include creation, management, and coordination of project timelines; managing resources and budgets; acting as a liaison between Regeneron's research, preclinical, clinical, and intellectual property groups; interacting with Regeneron's corporate partners, academic collaborators, consultants, and service providers; and assessing technologies and competition. Qualified candidates for the Research Program Coordinator position will have an MS degree in the biological sciences with program management experience and familiarity with high-throughput screens. Qualified candidates for the Development Program Coordinator position will have an MS degree in the biological sciences (an MBA would be a plus) and prior industrial, program management experience. Strong interpersonal, organizational, writing and computer skills are essential.

Job Code: EB 111

Technology Transfer Administrator

An opportunity exists for an individual prepared to play an important role in Regeneron's progressive Technology Transfer group

with primary responsibility for the administration of scientific collaborations with outside investigators. Duties may include drafting and negotiating Material Transfer Agreements, Consulting Agreements, License Agreements and Service Contracts. Qualified candidates will have an MS in molecular or cell biology, with laboratory experience, and 1-3 years experience in technology transfer. Excellent interpersonal, communication, and writing skills are essential. Computer proficiency required.

Job Code: EB 222

Regeneron is located on a campus-like corporate park and offers an outstanding benefits package including relocation, medical, dental, vision, Rx, stock options, 401(k) plan with match, long term disability, life insurance and paid holidays, vacation and personal days. Please visit our website at www.regeneron.com for more information. For consideration, please submit a cover letter indicating position of interest, along with a resume and salary requirements to:

REGENERON Pharmaceuticals, Inc.

Human Resources, (specify Job Code)
777 Old Saw Mill River Road,
Tarrytown, New York 10591
Fax: (914) 345-7790 • e-mail: jobs3@regpha.com
(Please provide an electronic version of your
resume or C.V. as text or PDF)

Regeneron...we thrive on unique challenges.
EOE M/F/D/V You'll thrive with us.

nature medicine

Seeks an assistant editor

This is a full-time position within an established editorial team based in New York City.

Applicants should have a strong research background in the biomedical sciences, a broad understanding and interest in biomedical research, excellent literary skills and a commitment to the communication of science.

This is an exciting opportunity to play an essential part in a top-ranked science journal while staying at the forefront of modern research. Although the successful candidate will focus on research manuscript selection and communication with authors and referees, s/he will participate in all aspects of the editorial process, including commissioning articles, writing and attending conferences.

We offer a competitive salary and excellent working conditions within a dynamic editing and publishing group that is also responsible for *Nature Genetics*, *Nature Structural Biology*, *Nature Biotechnology* and *Nature Neuroscience*.

Please submit a CV (with names of three references), a concise letter outlining your credentials, and a 500-word News & Views-style article on a recent exciting and newsworthy development in any area of biomedical research to: The Senior Editor, *Nature Medicine*; 345 Park Avenue South, New York, NY 10010-1707 (FAX 212 6835751; e-mail medicine@natureny.com), to arrive as soon as possible and no later than 9 August 1999.

The University of California at Davis (UCD), Center for Comparative Respiratory Biology and Medicine has been awarded a National Institute of Health Training Grant in Comparative Lung Biology and Medicine. The program is designed to provide opportunities for pre-doctoral and post-doctoral trainees to become independent investigators in lung biology research within the context of a multidisciplinary program dedicated to further understandings of inhalation toxicology and lung pathobiology. The following are part of the program.

Mentor

Ann C. Bonham, Ph.D.
Alan R. Buckpitt, Ph.D.

Area of Research Interest

Airway physiology and neural control
Glutathione metabolism and drug metabolizing enzymes

Carroll E. Cross, M.D. Oxidants/nitrosants, antioxidants and lung injury
Walter Finkbeiner, M.D. Airway epithelial cell biology and pathology
Laurel Gershwin, DVM, Ph.D. Airway immunology, IgE, and asthma
Shiri Giri, Ph.D. Lung fibrosis, injury/repair and pharmacology
Tzipora Goldkorn, Ph.D. Ceramide metabolism, signal transduction systems
Bruce Hammock, M.D. Enzymology of lung inflammation
Dallas Hyde, Ph.D. Airway inflammation and neutrophil biology
Jessie Joad, M.D. Airway hyper-reactivity and pharmacology
Marc P. Kaufman, Ph.D. Airway smooth muscle neural control
Jerald Last, Ph.D. Collagen biosynthesis and lung fibrosis
Kent Lloyd, Ph.D. Transgenic animal and tissue targeting gene expression

Paul A. Luciw, Ph.D. Molecular virology and AIDS
Kent Pinkerton, Ph.D. Inhalation toxicology and air pollution research
Charles G. Plopper, Ph.D. Clara cell biology, airway injury/repair, drug metabolism

Edward Schelegle, Ph.D. Airway physiology and pharmacology
Michael Sherman, M.D. Oxidant stress and lung metabolism
Albert van der Vliet, Ph.D. Peroxidases/nitrosants/inflammation and lung injury
Reen Wu, Ph.D. Gene expression and differentiation, injury/repair

Pre- and post-doctoral candidates with U.S. citizenship or with permanent resident status interested in pursuing an academic career in pulmonary pathobiology should send a cover letter and CV to one of the listed investigators or to Dr. C.E. Cross (PI), Center for Comparative Respiratory Biology and Medicine, Surge 1 Building, One Shields Ave, UCD, Davis, CA 95616. UCD is an equal opportunity employer, committed to excellence through diversity.

W H E R E Challenge + Creativity

IS THE FORMULA FOR SUCCESS.

MedImmune, Inc., a dynamic biotechnology company focused on developing antibodies and vaccines for the prevention and treatment of human diseases, seeks the following professional for their facility in Frederick, MD.

Metrology Specialist

You will develop procedures for and perform calibrations of equipment to assure all manufacturing, testing equipment and processes are in a calibrated state; generate required documents assuring compliance of manufacturing operation to regulatory agency and corporate requirements; establish and maintain product quality through process improvements and development/improvement of calibration methods. Candidate should possess an AA degree in a science-related discipline or be a HS graduate with technical school training and 5+ years hands-on experience in related field of work; familiarity with FDA regulated biotechnology or drug manufacturing requirements; and 5+ years experience in calibration with knowledge of FDA cGMP.

Please forward resumes to: MedImmune, Inc., HR Dept., Job Code: 619, 636 Research Drive, P.O. Box 489, Frederick, MD 21705-0489. Fax: (301) 228-5100. E-mail: jobopenings@medimmune.com EOE, M/F/D/V.

Visit our website:

www.medimmune.com



MedImmune, Inc.

POSTDOCTORAL FELLOWSHIP OPPORTUNITIES ON THE ROLES OF HIGHER ORDER CHROMATIN REMODELING IN CANCER AND AGING

The Laboratory of Molecular Growth Regulation, National Institutes of Child Health and Human Development (NICHD), National Institutes of Health (NIH) is seeking applications for a postdoctoral position to work on the roles of higher order chromatin remodeling in cancer and aging. Applicants must have a Ph.D. or M.D. and less than five years of postdoctoral experience, as well as demonstrated experience in molecular biology and a strong interest in heterochromatin, epigenetic silencing, and related areas of study. Fluency in English is essential.

Positions are available October 1, 1999. Interested applicants should submit a CV, bibliography, a cover letter with a brief description of research experience and interests, and the names of three references with phone numbers and e-mail addresses to:

Dr. Bruce Howard
Laboratory of Molecular Growth Regulation
National Institute of Child Health and
Human Development
National Institutes of Health
6 Center Dr. MSC-2753
Bldg. 6, Rm 416
Bethesda, MD 20892-2753
Phone: (301) 496-9038; Fax: (301) 480-9353
e-mail: howard@helix.nih.gov

NIH IS AN EQUAL OPPORTUNITY EMPLOYER.

VIRAL AND RICKETTSIAL ZONOSSES BRANCH

Division of Viral and Rickettsial Disease
National Center for Infectious Diseases
Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention is seeking qualified applicants for two senior positions in the Viral and Rickettsial Zoonoses Branch, Division of Viral and Rickettsial Disease, National Center for Infectious Diseases.

Rickettsiology Section Chief

The Section Chief of Rickettsiology will provide overall supervision for approximately 15 staff working with rickettsiae, ehrlichiae, and bartonellae. The Section Chief will provide expert advice and council to the Branch Chief, interact closely with epidemiologists in the Disease Assessment Section, and serve as coordinator of the WHO Collaborating Center for Rickettsial Reference and Research situated in the Branch. Research experience in one or more areas of microbiology, molecular biology, pathophysiology, or diagnostic methods as applied to rickettsial and related organisms is required. Microbiologists, physicians, or veterinarians with research experience in rickettsiology are encouraged to apply.

Qualifications preferred include a doctoral degree, significant scientific accomplishments in one or more areas or relevant research, and experience in developing, supervising and leading a research program.

Salary range is \$79,760 to \$103,684 per annum, depending on qualifications.

Senior Research Microbiologist in Rickettsiology

The Research Microbiologist will provide direction and help in establishing a new program focused on *Coxiella burnetii* and Q fever within the Rickettsiology Section of the Viral and Rickettsial Zoonoses Branch. This senior Research Microbiologist will provide expert advice and council to the Rickettsiology Section Chief and Branch Chief, interact closely with epidemiologists in the Disease Assessment Section, and coordinate activities essential to defining and responding to the potential use of *C. burnetii* as an agent of bioterrorism. It is expected that this person will build a program and eventually supervise 4 or more staff members involved in the study of Q fever. Research experience in one or more areas of microbiology, molecular biology, pathophysiology, or diagnostic methods as applied to rickettsial organisms, most notably *C. burnetii*, is required. Microbiologists, physicians, or veterinarians with research experience in rickettsiology are encouraged to apply.

Qualifications preferred include a doctoral degree, significant scientific accomplishments in relevant research, and experience in developing, supervising and leading a research program.

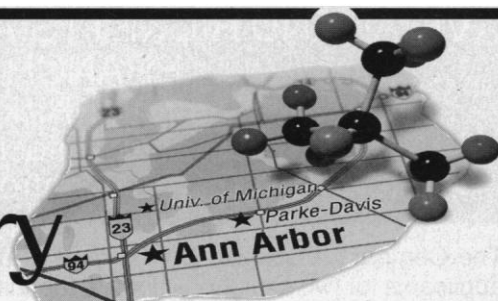
Salary range is \$79,760 to \$103,684 per annum, depending on qualifications.

Further information can be obtained from James E. Childs, ScD, Chairman, Viral and Rickettsial Zoonoses Branch Section Chief and Research Microbiologist Search Committee, Mailstop G-13, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, GA 30333; Telephone: 404-639-1075; FAX: 404-639-2778; or EMAIL: JFC5@CDC.GOV

Candidates interested in either job should send their curriculum vitae in confidence along with the names of four professional references to **Centers for Disease Control and Prevention, Attention Ms. Janie Oddy, MS C-19, 1600 Clifton Road, Atlanta, GA 30333** or by Email to JLOO@CDC.GOV

CDC is an Equal Opportunity Employer and provides a smoke-free environment.

Growth through Discovery



Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, has maintained an outstanding track record of innovation through scientific research to discover drugs for unmet medical needs.

Postdoctoral Research Fellow Biochemistry

Job Code: RJB-995981SC

This is an exciting opportunity in our ANN ARBOR, MI facility for a highly-motivated postdoctoral fellow to pursue leading-edge research in enzymes involved in post-translational modification.

The project will involve basic research in purification as well as biochemical and biophysical studies of a novel enzyme with therapeutic relevance in cardiovascular and neurodegenerative diseases. The candidate will be strongly encouraged to publish in peer-reviewed journals and to make presentations of the results at conferences. Additionally, you will have highly interactive relationships with academic groups at the University of Michigan.

Applicants should have a recent Ph.D. in Biochemistry, Cell Biology, or a related discipline with a strong background in enzymology, protein purification, cloning, site-directed mutagenesis, and expression of mammalian proteins.

We offer competitive salaries, outstanding benefits, and an environment that's conducive to professional growth. We have the above opportunity in ANN ARBOR, MI. For consideration, please forward your resume with Job Code, to: Parke-Davis, Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: 310-337-3367, E-mail: parkedavis@isearch.com.

www.parke-davis.com

Equal opportunity in action.
Smoke-free work environment.



PARKE-DAVIS
A Warner-Lambert Division

Purdue Biopharma L.P.

Purdue Biopharma, L.P., is a new R&D facility located in Princeton, New Jersey. To continue our staffing efforts, we are seeking a highly motivated information/scientific professional to support the growing R&D and manufacturing community.

SENIOR INFORMATION SCIENTIST

Reporting to the Library Director, you will work with scientific staff to assess needs and provide required information services. You'll conduct extensive literature searches; evaluate and synthesize results; as well as provide critical information to support corporate goals. You'll also select and acquire resources for our start-up library, plan and implement training programs; and promote the use of our printed and electronic resources, while coordinating with other corporate libraries.

Requirements:

- B.S. degree in Life or Health Sciences
- Master's degree or Ph.D. highly desirable
- 3+ years' industry experience
- Ability to search medical, scientific, patent and industry databases on Dialog, Data Star, Dow Jones, Internet, etc.
- Familiarity with GenBank SwissProt and other online biotechnology resources helpful
- Excellent written/verbal communication skills, ability to work independently, and a commitment to providing quality work in an exciting, team-oriented research environment

We offer competitive compensation, an attractive benefits package and opportunities for personal advancement and professional growth. For immediate consideration, qualified applicants should mail or fax resumes with salary requirement, to: Human Resources, Dept-IT/SM, Purdue, 100 Connecticut Avenue, Norwalk, CT 06850; FAX: (203) 851-5300. Corporate standards require drug testing and background investigation. We are an equal opportunity employer committed to diverse workplace.

PURDUE

Science into Practice

TM



Get connected!

*A sampling of graduate
schools currently listed on
Academic Connections:*

Baylor College of Medicine
Central America Health
Sciences University
Colorado State University
Cornell University
Dalhousie University
Dartmouth College
Emory University
Georgia State University
Northeastern University
NYU School of Medicine
Purdue University
Rockefeller University
State University of New York
at Buffalo
Texas A&M University
Texas Tech University
Thomas Jefferson University
Uniformed Services University
of the Health Sciences
University of Albany, State
University of New York
University of California,
Santa Barbara
University of Chicago
University of Cincinnati
University of Connecticut
University of Ottawa
University of Oklahoma Health
Sciences Center
University of South Alabama
University of Toronto

They did!

For information contact:

USA: BREN PETERS

Ph: (202) 326-6541

Fx: (202) 289-6742

E-mail: science_classifieds@aaas.org

Europe: DEBBIE CUMMINGS

Ph: +44 (0) 1223 326500

Fx: +44 (0) 1223 326532

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

ACADEMIC CONNECTIONS

Science's online
graduate program index

Science

www.scienceonline.org

Click on Science Careers,
then click on Academic
Connections.

Scientists



Located in the San Francisco Bay Area, Connetics Corporation is a growing biopharmaceutical company focused on the acquisition, development and commercialization of products in the areas of rheumatology and dermatology. We currently have an exciting opportunity for experienced, hands-on professionals to join our expanding R&D team.

Scientist, Assay Development & Clinical Sciences

In this key role, you will develop assays to support our preclinical & clinical protein and drug products. You will also develop/implement cellular & biochemical assays to characterize newly designed products. Candidates must possess a Ph.D. in cell biology, biochemistry, immunology or related field; 2-5 years' experience in immunoassay & bioassay development and signal transduction methodologies; hands-on experience with cell-based biochemical assay development; familiarity with quantitative biological methods and analytical chemistry & biochemistry; and excellent written/verbal communication skills. Relevant product development experience in the biopharmaceutical industry is a plus. The ability to develop productive academic collaborations helpful. (Job Code: RD60-99-S)

Postdoctoral Fellow, Molecular Biology

Connetics is looking for a motivated and creative Molecular Biology Postdoctoral Fellow for our Cell Biology Department. This postdoctoral position will be an integral part of a collaborative group of scientists, under the direction of Elaine Unemori, Ph.D., engaged in understanding the biology of relaxin. The successful candidate will work with other group members to develop relevant read-outs for relaxin responsiveness in targeted cells and tissues. The focus of the fellowship will be to work on understanding the basis of relaxin responsiveness and signalling in cells and tissues. Candidates must have a Ph.D. along with demonstrated skills in cloning, mutagenesis, PCR analysis, gel shift assays, etc. There will be an opportunity to publish scientific findings and eventually join the Connetics scientific team after completion of the two year postdoctoral program. (Job Code: RD300-99-S)

Connetics offers competitive salaries and benefits, stock options, and the opportunity to make significant contributions. Please send your resume to: **Connetics Corporation, HR Dept., (Attn: Job Code), 3400 West Bayshore Rd, Palo Alto, CA 94303; fax: (650) 843-2899; email: hr@connetics.com. EOE**

www.connetics.com



UNIVERSITY OF KUWAIT FACULTY OF MEDICINE HEALTH SCIENCES CENTRE

Pre-Clinical and Clinical Appointments:

Applications are being sought for the following appointments in the Faculty of Medicine:

- MEDICINE:** Associate/Professor - Infectious Diseases
MICROBIOLOGY: Assistant/Associate/Professor - Medical Microbiology
SURGERY: Associate/Professor - Anaesthetists (experienced in intensive care)
 - Orthopaedic surgeons
PHYSIOLOGY: Assistant/Associate/Professor - General Physiology (1)
 - Endocrine Physiology (1)
 - Respiratory Physiology (1)

BIOCHEMISTRY: Professor - Biochemistry
 Research expertise should be in the area of molecular biology, biotechnology, molecular genetics, receptor superfamily or signal transduction with an excellent publication record.

COMMUNITY MEDICINE & BEHAVIORAL SCIENCES:

- Assistant/Associate/Professor - Biostatistics
 - Medical Sociologist/Anthropologist
 - Health Planning and Administration Specialist
 - Environmental and Occupational Health

PATHOLOGY:

- Assistant/Associate - Haematology (2)
Assistant/Associate/Professor - Histopathology (1)
Assistant/Associate/Professor - Applied Cell Biology (2)
Associate/Professor - Cytopathology (1)
 Cellular and molecular pathology is required for the Applied Cell Biology position.

RADIOLOGY:

- Associate/Professor - Radiologists (6)
NUCLEAR MEDICINE: Assistant/Associate/Full Professor
 - Health Physicist (1)
 - Nuclear Physicians (2)
 - Radiopharmacist or Radiochemist (1)
 - Nuclear Physicist (1)

PHARMACOLOGY & TOXICOLOGY:

- Assistant/Associate/Full Professor
 - Neuropharmacology
 - Cardiovascular/Molecular Pharmacology
 - Clinical Pharmacology/Toxicology
 - Biochemical Pharmacology

Requirements for Appointment.

Applicants should possess a Ph.D. or an equivalent high professional qualification i.e. FRCS/MRCP/MRCOG/MRCPPath/MD/American Board in their respective specialty and have conducted and published research in their field.

Conditions of Appointment:

Total monthly salaries will be within the following scales according to qualifications and experience (1KD=1.9 Sterling Pound, US\$3.3 approximately).

	Professor	Min-Max	Associate	Min-Max	Assistant	Min-Max
Clinical	2585-2745	KD	2290-2450	KD	2010-2170	KD
Non Clinical	1670-1830	KD	1320-1480	KD	1030-1190	KD

A Social allowance will be paid in addition to the monthly salary as per the University regulations.

Other Benefits:

Conference attendance, Gratuity and housing allowance or furnished accommodation. Free medical treatment in Kuwait. Free annual round-trip air tickets from country of Citizenship or permanent residence for self and family up to three dependent children. Baggage and freight allowance. Education fees for a maximum of three children in Kuwait from elementary through high school. No taxation. Currency is transferable without restriction. 60 days paid annual leave.

Method of Application:

Curriculum vitae which should include the names of 3 referees; personal particulars; copy of the relevant pages of passport; qualification with dates, career history with dates; teaching experience, research accomplishments, and where appropriate clinical experience. Should be sent no later than October 31, 1999.

**THE VICE-DEAN ADMINISTRATION
(RECRUITMENT OFFICE)
FACULTY OF MEDICINE
KUWAIT UNIVERSITY
P.O. BOX 24923
13110 SAFAT, KUWAIT
FAX: 965-5318454**

INNOVATION

It's what sets some explorers apart from the rest.

We're a rapidly growing pharmaceutical company breaking new ground in the field of polymer-based, non-absorbed drugs. Our recently approved product is the first non-absorbed drug approved for the reduction of serum phosphorus in chronic renal failure patients on hemodialysis. And we're following up this first win with our non-absorbed cholesterol reducer, which we plan to submit to the FDA for approval in the middle of this year.

As a GelTex employee, you'll be part of the team responsible for developing such innovative and life-enhancing technology. You'll work in a collaborative environment where all ideas are welcome and creativity is encouraged.

DIRECTOR, MUCOSAL BIOLOGY

Challenging opportunity to lead an interdisciplinary research team of biochemists, physiologists and chemists in the discovery of novel therapeutics for treatment of disorders of the mucosa, including mucositis and ulcerative colitis. Ideal candidate will also be expected to identify new drug discovery approaches and mechanisms to treat mucosal diseases. Requires Ph.D. in a relevant biological science and 7+ years' experience in mucosal research, ideally within the pharmaceutical industry. Should also possess significant scientific track record and the ability to work within a multidisciplinary environment. **Job Code: TN001**

GelTex offers competitive salaries and benefits as well as stock options for all of its employees. Interested candidates should forward a resume and cover letter to: GelTex Pharmaceuticals, Inc., Human Resources, Job Code: _____ Nine Fourth Ave., Waltham, MA 02451. Fax: (781) 290-5890. EOE, M/F/D/V.



WWW.GELTEX.COM

GLOBAL OPPORTUNITIES



RIKEN Brain Science Institute (BSI), Japan Applications Invited for Heads of New Laboratories in the "Creating the Brain" Area

Applications are invited for heads of several new laboratories in the "Creating the Brain" Area of RIKEN Brain Science Institute (BSI).

BSI was established in October 1997 to promote three strategic research areas: "Understanding the Brain", "Protecting the Brain" and "Creating the Brain". The "Creating the Brain" area aims at elucidating the information principles in the brain by theoretical and experimental approaches and aims to create new information technology based on brain-style computations and systems. The targets include theoretical foundation of neurocomputing, modeling of structures and functions of the brain, their simulations, and establishment of brain-style computing systems. The "Creating the Brain" area now consists of two research groups, the "Brainway Group" headed by Gen Matsumoto and the "Brain-Style Information Systems Group" headed by Shun-ichi Amari. For more information, see the web site: <http://www.brain.riken.go.jp>.

BSI will establish two more research groups including several laboratories in order to further develop activities of the creating the brain area. One new group is concerned with computational cognitive neuroscience of higher-order brain functions. It will include laboratories which study intelligent, emergent and complex systems, brain-style artificial intelligence, languages, logical reasoning, symbol processing, and brain-style super-parallel computation. The other group is concerned with brain-style behavioral systems and robotics. It will include laboratories which study motor planning, command generation, brain-style control including learnable inner models and inverse models, mechanisms of sensorimotor transformations and brain-style robot systems. A new computational neuroscience research laboratory will also be established in the existing groups.

New laboratory heads will be required to organize a team of 5 - 10 researchers and technical staff and be provided generous support for five years. A review of progress by international review committee occurs every five years with possibility of contract renewal. Applications are encouraged from outside Japan as well as inside Japan, under the condition that heads must be willing to work at BSI full time.

Applicants interested in leading a new laboratory are invited to submit a research proposal (of no more than 2,000 words) and a suggested name for the laboratory. In addition, applicants should provide a full CV, a list of all publications with reprints of five papers, a statement of research interests and the names and addresses of three references to:

**Search Committee (10), RIKEN Brain Science Institute,
2-1 Hirosawa, Wako-shi, Saitama 351-0198, Japan
Fax: +81-48-467-9687, e-mail: search10@brain.riken.go.jp**

Deadline: September 30, 1999

Launch your career to new heights with Job Alerts.



**FREE
one-time
registration;
weekly job
notification!**

Science's Job Alerts
service delivers weekly
notification via e-mail of
job openings matching
your job search criteria.

**Science
Professional
Network**

www.scienceonline.org
Click on *Science Careers*

Serono Pharmaceutical Research Institute



The Institute is an affiliate of The Ares-Serono Group, which has its Executive Headquarters in Geneva and is a leading multinational engaged in research, development and marketing of products in the biotechnology field. The Institute is a state-of-the-art centre of scientific excellence. Its research is directed towards the identification of novel molecular mechanisms underlying disease and the discovery of new drugs.

A challenging and exciting opportunity exists for a

BIOCHEMICAL PHARMACOLOGIST

Applicants will have a Ph.D. in biochemistry, pharmacology or a related discipline. They will also have 2-3 years experience in the design, validation and implementation of enzyme assays for use in highthroughput screening campaigns.

The position requires a strong background in enzymology. As part of the Biochemical Pharmacology Group, the successful candidate will participate in the design and implementation of highthroughput assays, as well as the down stream enzymology of key targets in the CNS and immunology area. The successful candidate will work closely with a variety of cross functional project teams, providing key enzymology experience and insight.

Informal enquiries concerning the position can be directed by e-mail to dennis.church@serono.com.

If you are interested, please send your curriculum vitae with a list of publications and the names of three referees to the Personnel Department of the Institute.

Serono Pharmaceutical Research Institute

Ares-Serono International S.A.

14, chemin des Aulx

1228 Plan-les-Ouates

Geneva /Switzerland

Telephone

+41 22 706 96 66

Telefax

+41 22 794 69 65

Bioscientist

AstraZeneca is a new force in world pharmaceuticals, formed by the merger of Astra AB and Zeneca Group PLC. Our portfolio spans seven major therapeutic areas including: cardiovascular, oncology, respiratory, anti-infectives, and CNS.

We seek a Bioscientist to provide an efficient flow cytometry service to the various research groups in our Target Discovery Department, located in our Wilmington, DE research facility. Key responsibilities will include daily setup and operation of the FACS Vantage system; preparation of samples for flow cytometry including cloning and transfection of appropriate reporter constructs; analysis and reporting of data from flow cytometry experiments.

The position requires a BS degree in the biological sciences, biomedical engineering, or related discipline, plus 2-5 years of prior FACS experience. Advanced knowledge in the use of computer software (e.g. Cell Quest) for data analysis is essential. Experience in molecular and cell biology methods (tissue culture; cloning; Southern, Northern and Western blotting; immunoprecipitation) is desirable.

We offer an excellent compensation and flexible benefits program, and opportunities for growth with one of the world's leading pharmaceutical companies. To apply, please send your resume/c.v. to: **K. Riley, OW3, Human Resources, AstraZeneca, 1800 Concord Pike, P.O. Box 15437, Wilmington, DE 19850-5437. Fax: 302-886-7124.** To learn more about AstraZeneca, visit our website at www.astrazeneca-us.com.

AstraZeneca

A Business Unit of Zeneca Inc.
An Equal Opportunity Employer M/F/D/V.

SYMPOSIUMS

3rd Colmar Symposium for Biological Sciences
November 3 - 4, 1999 - Colmar (France)

Plant Biotechnology & Food for the 21st Century

2nd BioValley Life Sciences Conference
November 5, 1999 - Freiburg (Germany)

Symposium Chairman

Heinz Saedler, Max Planck Institut für Züchtungsforschung, Köln (Germany)

Session I Product benefits through genetic engineering

Chairman: Enno Krebbers, Du Pont Agricultural Enterprise, Wilmington, DE (USA)

Session II Product safety issues

Chairman: Terry Medley, Du Pont Agricultural Enterprise, Wilmington, DE (USA)

Session III Genomic Research

Session IV The Future of Plant Engineering

Chairman: Gunter Neuhaus, ZAB Plant Biotechnology, Freiburg (Germany)

FURTHER INFORMATION

Registration and hotel reservation forms available at
www.biovalley.com/events/seminars/main

OR CONTACT US:

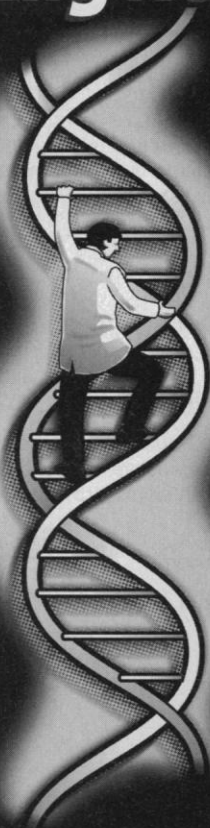
Géraldine MIELKE, Symposium coordinator
Château Kiener - 24 rue de Verdun - F-68000 COLMAR
E-mail: symposium.bio@mcnet.fr / Fax: + 33 (0)3 89 21 65 31
In the US: Anne O'NEILL e-mail: aconeill@aol.com / Fax +1 609 497 0119



ASSOCIATION
"COLMAR - LIBERTY"

BIOVALLEY
The Life Sciences Network

Scaling New Heights in Biotechnology



Science

Relied on by 159,536*
subscribers worldwide

*Science BPA audit December 1998

Science Research

Cutting-edge papers from
the world's leading scientists.

Science News

The latest topics from
front-line journalists.

Science's Compass

Discussion forum for the hottest debate.

Special Biotechnology Features

- PCR Update
- Frontiers in Biotechnology:
Plants Tech. Sight
- Genome Issue

Biotechnology Supplements

- Global Biotechnology
Centres: N. America, Europe
- Focus on careers

Attending Biotechnology Conferences

- 4th International
Separations in
Biotechnology
- Biotechnology Industry
Organisation '99
- 9th European Congress on
Biotechnology/BioTop '99
- 11th International Genome
Sequencing & Analysis
Conference
- Biotechnica

Order your subscription today.

INTERNATIONAL
ORDERS ONLY *

- ☐ Yes, I wish to join AAAS
and receive a one year
subscription to *Science*
for only \$200

Name Address

- ☐ Yes, I wish to join AAAS
and receive a one year
subscription to *Science*,
plus *Science ONLINE* for
\$212

Country Email

Subject Discipline.....

Payment: ☐ I enclose a cheque made payable to AAAS for US\$ ☐ Please charge my credit card US\$

Card type VISA / Mastercard / AMEX (circle one) Card number Expiry Date

Signature Date

Fax your order to +44 (0)1223 326501

* Rates are applicable only to people ordering from outside the US, Canada and Mexico.

AAAS Membership includes 51 issues of *Science*. Prices are valid until 31/12/99. Eurocheques not accepted. \$62 plus postage allocated to *Science*. Please allow 4-6 weeks for receipt of first issue. For more information call +44 1223 326500. Data Protection: By ordering *Science* I will receive mail related to my account, however:

☐ Please do not make my name available for any offers from parties outside AAAS. ☐ Please do not make my name available for any offers from parties outside AAAS, or from other AAAS or *Science* products.

Return subscriptions to: *Science*, Science International, Bateman House, 82-88 Hills Road, Cambridge CB2 1LQ, UK

S9XBT4

POSITIONS OPEN

DISTINGUISHED CHAIR FACULTY POSITION CENTER FOR IMMUNOLOGY

The University of Texas Southwestern Medical Center at Dallas seeks to fill a Distinguished Chair faculty position in the Center for Immunology. We seek a scientist with an M.D. and/or Ph.D. degree(s) who has achieved international recognition in immunology. In addition, the appointee must have an established record mentoring scientists in training, and strong NIH-funded research programs. Extensive resources are available to support the transition of the appointee to UT Southwestern, and to foster the growth of the candidate's research program within the Center for Immunology. Researchers in all areas of immunology are encouraged to apply; however, particular consideration will be given to scientists using animal models to investigate human disease processes. The Center for Immunology is in the process of filling multiple faculty positions and the appointee will play a key role in the completion of this recruiting process.

Please submit current curriculum vitae and summary of proposed research programs and interests, and the names of four references to: **Dr. Edward Wakeland, Director—Center for Immunology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9093. E-mail: edward.wakeland@email.swmed.edu.**

All applications must be received by September 15, 1999.

Equal Opportunity Employer.

DIRECTOR, ARIZONA LIVER INSTITUTE ASSOCIATE/FULL PROFESSOR

The University of Arizona College of Medicine is establishing a liver research institute and is recruiting an outstanding Physician/Scientist to serve as the Director of the institute and as a tenured faculty member of the Department of Medicine. The institute is supported with the equivalent of a \$10 million endowment. The new Director will be required to develop a targeted research program in one or several areas of liver disease investigations. Preferred: an established Research Scientist with an M.D. or M.D.-Ph.D. degree, extensive record of research in the field of liver disease, and evidence of ongoing federal peer-reviewed funding. Direct applications to:

James E. Dalen, M.D., M.P.H.
Vice President for Health Sciences
Dean, College of Medicine
The University of Arizona
P.O. Box 245018
Tucson, AZ 85724-5018

Application review begins September 9, 1999, and will continue until position is filled. See **website: <http://w3.arizona.edu/~ahschr/jobs.htm>** (reference #995609). The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/Disabled/Veterans.

FACULTY POSITION IN CELL BIOLOGY UNIVERSITY OF ROCHESTER DEPARTMENT OF BIOLOGY

Applicants are invited for a tenure-track position of **ASSISTANT** or **ASSOCIATE PROFESSOR** in the Department of Biology. The Department seeks individuals of outstanding potential in the area of prokaryotic or eukaryotic cell biology. Current Biology Department faculty employ genetic and molecular genetic approaches to problems of cellular, developmental, and evolutionary biology. The Biology Department is located on the River Campus, adjacent to allied Departments at the University of Rochester Medical School. Interviews will begin in October. Please send a curriculum vitae, summary of research and teaching interests, and request that three references be sent to: **Chair, Cell Biology Search Committee, Department of Biology, University of Rochester, Rochester, NY 14627.**

The University of Rochester is an Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION MOLECULAR BIOLOGY/ BIOCHEMISTRY RESEARCH

The Departments of Biochemistry and Orthopedic Surgery at Virginia Commonwealth University invite applications for a full-time, non-tenure-track academic position, with the future potential availability of tenure-track, at the **ASSISTANT/ASSOCIATE PROFESSOR** level in the area of molecular biology/biochemistry. Applicants must have a Ph.D. or equivalent with expertise in molecular/cell biology and biochemistry, and demonstrated interest in applications to the musculoskeletal system. Preference will be given to individuals with a background in cell/explant culture and postdoctoral experience. *Applicants must be U.S. citizens or permanent residents and must possess excellent oral and written (English) communication skills.*

The successful candidate will join a multidisciplinary team of Clinical and Engineering Researchers investigating musculoskeletal tissue injury/repair/pathology. The Molecular Biology/Biochemistry Laboratory, a division of the Orthopedic Research Laboratory, has state-of-the-art equipment, and is fully functional with ongoing projects in cartilage, bone, and ligaments.

The successful candidate will be expected to direct the Molecular Biology/Biochemistry Laboratory, to supervise trainees of this laboratory, and to facilitate collaborative interactions between the Orthopedic Surgery and Biochemistry Departments. A modest amount of teaching will be required. The development of independent research interests would be expected.

Qualified applicants should forward a curriculum vitae, a description of future research goals, and have three letters of reference sent to:

Robert F. Diegelmann, Ph.D.
Chair, Search Committee (Position No. F-0723)
Department of Biochemistry and
Molecular Biophysics
P.O. Box 980614
Virginia Commonwealth University
Richmond, VA 23298-0614

Review of applications will begin on November 1, 1999.

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

FACULTY POSITIONS IN CARDIOVASCULAR PATHOLOGY AND CANCER IMMUNOLOGY

Applications are invited for several research and tenure-track faculty appointments at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level, to be made in the Department of Pathology and Laboratory Medicine in association with the Leonard and Madlyn Abramson Family Cancer Research Institute at the University of Pennsylvania Cancer Center, the Institute for Medicine and Engineering, and the Institute for Human Gene Therapy.

Candidates should possess M.D. and/or Ph.D. degrees, and be qualified in one of the above areas. Additional criteria for selection will include evidence of creative, fundamental research and a strong indication of research funding potential or record commensurate with the level of appointment. Candidates will be expected to establish new research activities to complement and strengthen existing research areas, and participate in interdisciplinary academic programs. Consideration of candidates will begin on receipt of applications and continue until positions are filled.

Applicants should send a full curriculum vitae, names and addresses of three references, a statement of research interests, and three copies of recent publications to: **Nicholas K. Gonatas, M.D., University of Pennsylvania, Department of Pathology and Laboratory Medicine, 418 Johnson Pavilion, 3610 Hamilton Walk, Philadelphia, PA 19104-6079.**

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

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION UNIVERSITY OF UTAH Department of Pharmaceutics and Pharmaceutical Chemistry

The University of Utah invites applications for a tenure-track faculty position in pharmaceutics and pharmaceutical chemistry (**website: www.pharmaceutics.utah.edu**). Candidates must have a Ph.D. or equivalent degree. Preference will be given to candidates with a strong background in basic sciences (physical chemistry and biophysics) and with interdisciplinary research interests and experience applied to pharmaceutics and drug delivery.

She/he will be expected to develop an independent research program and to teach both graduate and professional courses in the College of Pharmacy. Interested individuals are invited to submit a complete curriculum vitae; names, FAX/telephone, mailing and e-mail addresses of at least three references; a short description of current research and teaching activities; and a statement on career goals to: **Faculty Search Committee, Department of Pharmaceutics and Pharmaceutical Chemistry, 30 South 2000 East, Room 301, University of Utah, Salt Lake City, UT 84112.** We will begin accepting applications August 15, 1999. The review process will begin October 1, 1999, and continue until the position is filled. Questions may be addressed to: **J. Kopecek, Department Chairperson, Telephone: 801-581-4532; e-mail: jindrich.kopecek@m.cc.utah.edu.**

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

DRUG ABUSE RESEARCHER

Applications are invited for a tenure-track position in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center. The position will be at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level, depending upon qualifications. Candidates should have a Ph.D. in psychology, pharmacology, or neuroscience and/or M.D. with expertise in drug abuse research using human subjects. The successful candidate will be expected to develop an externally funded research program and to establish collaborative relations with other scientists and physicians within the department. Salary will be commensurate with rank. Start-up funds and space are available.

Applicants should send curriculum vitae, a statement of current and future research goals and names of three references to: **William L. Woolverton, Ph.D., Chair of Search Committee, Department of Psychiatry and Human Behavior, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.**

Applications will be accepted until the position is filled. *Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.*

Macomb Community College, located in the northeastern area of Metropolitan Detroit, is seeking candidates for

ASSOCIATE DEAN SCIENCE AND MATHEMATICS (RECRUITMENT EXTENDED)

Master's degree required. Doctorate desirable. A minimum of five years of successful administrative experience related to the duties of the position. Teaching experience desirable. Usual office conditions. Travel between campuses. Hours may vary. Some evenings and weekends required. 1998-99 salary range: \$53,046 to \$81,309; placement commensurate with experience.

To receive application and job description, **Telephone: 810-445-7885**, or you may view description and print an application from our **website: www.macomb.cc.mi.us**. FAX to FAX: **810-445-7874**. To ensure consideration send in application, letter addressing how you meet the stated qualifications, transcripts, and résumé immediately. Screening in progress. *Equal Employment Opportunity/Affirmative Action Employer.*

PHARMACEUTICAL

3-Dimensional Pharmaceuticals, Inc. is a drug discovery company which has developed a proprietary technology platform uniquely integrating structure-based drug design, combinatorial chemistry, and high-throughput screening for the cost-effective discovery of novel pharmaceuticals. We are currently seeking motivated individuals with excellent communication skills and outstanding qualifications to join our team in the following areas:

Enzymology

Ph.D./M.S./B.S.-level positions exist for candidates with experience in designing and performing assays for compound characterization (e.g., colorimetric, fluorimetric, ELISA, etc.) and mechanism of action studies with enzymes and/or receptors. Experience with high-throughput assays is a plus. Performance within a multidisciplinary drug discovery team is expected.

Chemical Compound Archive

Associate needed to coordinate archiving thousands of chemical compounds. Training beyond high school in chemistry or biochemistry and familiarity with computer database are expected. Experience with automated liquid handling equipment is a plus.

Located in Exton, PA, 3DP offers a comprehensive compensation and benefits package. Qualified individuals are invited to send their cover letter (indicating position desired) and resume with contact data for three references before August 15, 1999 to:

3-Dimensional Pharmaceuticals, Inc.
Attn: Human Resources
665 Stockton Drive, Suite 104
Exton, PA 19341



3-Dimensional Pharmaceuticals, Inc.

An equal opportunity employer

No phone calls, please.

www.3dp.com

EUROPEAN OPPORTUNITIES

THE WORLD HEALTH ORGANIZATION

seeks

TWO MEDICAL OFFICERS



PROGRAMME OBJECTIVES: The Special Programme for Research and Training in Tropical Diseases (TDR) develops new methods of preventing, diagnosing and treating selected tropical diseases, which would be applicable, acceptable and affordable by developing endemic countries, which require minimal skills and supervision and can be readily integrated in the health services of these countries; strengthens the capability of such countries to undertake the research required to develop these new disease control strategies, through training in biomedical and social sciences and support to institutions.

The following positions are available in the programme area of Basic and Strategic Research:

(1) Team Coordinator and Manager, Steering Committee on Pathogenesis

Responsible for coordinating TDR's Basic and Strategic Research in Pathogenesis, Molecular Entomology, Functional Genomics and Social, Economic and Behavioural Research. As Manager, Steering Committee on Pathogenesis, he/she is responsible for the day-to-day operations of the Committee and technical and operational review of research projects. He/she coordinates TDR pathogenesis activities and assists the scientific community with the identification of new opportunities for research.

QUALIFICATIONS: Medical degree, with postgraduate training in parasitology and/or clinical tropical medicine. Alternatively a doctorate in biological sciences and experience of research in tropical diseases, in particular parasitology. A minimum of 10 years' experience in research in parasitology and/or tropical medicine, including science/research administration.

(2) Manager, Steering Committee on Molecular Entomology

Responsible for the day-to-day operations of the Committee and technical and operational review of research projects. He/she coordinates TDR vector control activities and assists the scientific community with the identification of new opportunities for research.

QUALIFICATIONS: Doctorate degree in biology/parasitology with postdoctoral training in genetics/entomology/molecular biology. A minimum of 10 years' experience in research related to tropical medicine with expertise in design and management of research projects.

For both positions fluency in English or French with a working knowledge of the other language is required.

An attractive package of salary, international allowances and benefits is offered.

Applicants are requested to submit either an application form (Personal History Form) which is available on the Web site at: <http://www.who.int/per/vacancies>, or a detailed curriculum vitae. The application/CV should reach the following office within three weeks of publication quoting reference CDS/VAC

Manager, MSU/CDS, World Health Organization

20, avenue Appia - CH-1211 Genève 27 (WHO Facsimile N° 791.4821)

WHO has a smoke-free environment. Applications from women are encouraged.

Research Opportunities in Developmental Therapeutics

Frederick Cancer Research & Development Center

National Cancer Institute, NIH

POSTDOCTORAL POSITIONS are available in the Pharmaceutical and Experimental Therapeutics Section of the Developmental Therapeutics Program. Protein chimeras are designed, expressed and biologically characterized *in vitro* and in mice with the aim of specifically targeting tumor cell growth. Current projects also involve identification of new tumor related antigens using combinatorial methods involving receptor ligand library screening and mechanisms of drug induced apoptosis. Applicants should have a strong background in molecular biology, particularly antibody engineering, phage display and recombinant protein expression and/or mechanisms of receptor/ligand actions. Candidates must have less than 5 years of postdoctoral experience. Send curriculum vitae and correspondence to:

Laboratory of Drug Discovery Research and Development
NCI-Frederick Cancer Research and Development Center
Building 567, Rm. 162
Frederick, MD 21702
E-mail: rybak@ncifcrf.gov

EUROPEAN OPPORTUNITIES

Charité

MDC

MEDICAL FACULTY of the CHARITE, HUMBOLDT UNIVERSITY BERLIN and MAX DELBRÜCK CENTER for MOLECULAR MEDICINE (MDC) BERLIN-BUCH invite applications for the following position:

Full Professorship for Molecular Medicine

(C-4 BBesG; Code designation Prof. 180/99)

The occupant of this chair will be a full-fledged member of the Medical Faculty Charité as well as the Max Delbrück Center for Molecular Medicine (MDC) Berlin-Buch. Intended is the establishment of a link between the basic sciences and clinical medicine, in the framework of the curriculum: "molecular medicine".

The applicant will be expected to present outstanding research credentials, as well as documentation of didactic excellence and organizational skills. An outstanding internationally recognized scientific record of accomplishments in the area of molecular medicine, especially medical genetics and functional genomics, is expected as well as a program that can be smoothly integrated into the ongoing areas of expertise at the Charité and the MDC.

Appropriate space, positions and funds for laboratory set-up and operation will be provided by the MDC. In addition the successful applicant will be expected to apply for extramural funding.

A letter of application, curriculum vitae, bibliography, documentation of teaching experience, and reprints of important publications should be forwarded as of 4 weeks from the initial date of this announcement to:

Dean, Charité Medical Faculty, Humboldt-Universität zu Berlin, 10098 Berlin, Germany or to:

Scientific Director, Max-Delbrück-Centrum für Molekulare Medizin (MDC) Berlin-Buch, Robert-Rössle-Str. 10, 13125 Berlin, Germany

Applicants with disabilities will be given preferential consideration if all other qualifying factors are equal. The Medical Faculty Charité and the MDC are equal opportunities employers and welcome applications from women in order to increase the proportion of female staff in University research and teaching.

The MDC is a member of the Hermann von Helmholtz Association of National Research Centers supported by the Federal Republic of Germany and by the Berlin Regional Administration.

For further information on the MDC or the Humboldt University Berlin please visit our web site (<http://www.mdc-berlin.de> or <http://www.charite.de>).

Bayer is a globally active, research-based company in the fields of chemicals and life-sciences, headquartered in Leverkusen/Germany. With total annual sales of DM 55 billion and an annual R&D budget of DM 4 billion in 1998, we can offer a very attractive working environment for highly-motivated people. (For more details refer to <http://www.bayer.com>).

At our central informatics division in Leverkusen, Germany, we develop state-of-the-art IT solutions for Bayer's world-wide research and development needs in material and life science.

For our future engagement in Bioinformatics and our strong expansion of Cheminformatics in combinatorial research we are seeking highly motivated scientists with a PH.D. in physics, chemistry, biology or computer science. We appreciate team-oriented persons who offer excellent communication skills and enjoy working in a highly dynamic and intellectually stimulating environment in one of the largest chemical-pharmaceutical companies.

Bioinformatics

You will design, develop and implement integrated IT solutions at the intersections of molecular biology and chemistry in close connection with the latest R&D projects needs. In a challenging, highly visible position with a great future promise you will be working in an interdisciplinary team of scientists with world-wide impact. We expect a broad knowledge of Bioinformatics related software and databases together with expertise in some of the following areas:

- computer-aided sequence analysis of proteins and genes
- metabolic pathway analysis
- visualization of genomic information
- genome comparison

Cheminformatics in combinatorial research

You will use information technology and soft computing techniques to create an infrastructure for integration and mining of data from all aspects of the combinatorial research process in material and life science.

In a rapidly expanding area of science your contribution will be highly appreciated and you will enjoy excellent prospects. With outstanding skills in computer science and software development you are familiar with some of the following areas:

- drug design process
- material and catalyst research
- screening techniques (HTS)
- data mining and analysis

For further information do not hesitate to contact Dr. Achim Zielesny (e-mail: achim.zielesny.az@bayer-ag.de)

If your background and personal experience fits to one of these profiles, please send your complete application (including a CV, a brief description of research experience, a list of publications, names of referees) and ref.no. 934 to:

Bayer AG, Hochschulmarketing, Hauptstrasse 119, D-51368 Leverkusen, Germany



POSITIONS OPEN

ASSISTANT PROFESSOR POSITIONS VASCULAR BIOLOGY PROGRAM

The Vascular Biology Program is a new initiative at The University of Tennessee, Memphis and is seeking qualified tenure-track faculty at the Assistant Professor level in the area of vascular biology with focus on endothelial cell function, mechanisms of angiogenesis, cell growth and apoptosis, tumor cell progression, and metastasis.

Located in the Medical Center of the University of Tennessee in Memphis, the Vascular Biology Program provides a productive research environment for scientific endeavors and interdisciplinary collaborations. Basic, translational, and clinical research are integral parts of the Program's activities.

Successful candidates will have a Ph.D. or M.D. degree or both, two to five years of postdoctoral experience, and a strong publication record. Laboratory and office space as well as start-up funds will be provided. Faculty are expected to fund the majority of their research program and to develop collaborations with existing faculty on campus.

Please send your curriculum vitae, a letter detailing your specific training and research interests, date of availability, and the names and addresses of three references to:

Lisa K. Jennings, Ph.D.
Director, Vascular Biology Program
The University of Tennessee, Memphis
Coleman Building H300
956 Court Avenue
Memphis, TN 38163

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

PROFESSOR OF NUTRITIONAL BIOCHEMISTRY Harvard School of Public Health

The Department of Nutrition is seeking candidates for the position of Professor of nutritional biochemistry. Candidates should have an ongoing research program with emphasis on the transport, metabolism, or function of nutrients. Preference will be given to individuals with a research interest in diseases of public health importance and demonstrated capacity for multidisciplinary research. The successful candidate will be expected to interact with the faculty of the Department of Nutrition and the Division of Biological Sciences and contribute to their teaching and training programs.

Please send curriculum vitae, a short statement of research interests and field activities, and names of three references to:

Dyann F. Wirth, Ph.D.
Chair, ad hoc Search Committee
for a Professor of Nutritional Biochemistry
Office for Academic Affairs
677 Huntington Avenue
Boston, MA 02115

The Harvard School of Public Health is committed to increasing the representation of women and minority members among its faculty and particularly encourages applications from such candidates.

SABA UNIVERSITY SCHOOL OF MEDICINE

Several full-time, medical school faculty openings in the basic sciences (anatomy, histology, microbiology, pathology, clinical medicine, physical diagnosis, and USMLE review). Salary range \$36,000 to \$42,000 U.S. dollars, tax-free. All positions are on Saba, a small, tropical, Dutch island near St. Maarten. Clean, crime-free, English speaking, 5:1 student-faculty ratio. Write or call:

Dr. David Fredrick
P.O. Box 386
Gardner, MA 01440
Telephone: 978-630-5122
FAX: 978-632-2168
E-mail: saba@tiac.net
Website: www.saba.org.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF ANATOMY AND NEUROBIOLOGY Dalhousie University Halifax, Nova Scotia, Canada

The Department of Anatomy and Neurobiology (website: <http://www.anatomy.dal.ca/>) at Dalhousie University is seeking applications for two probationary tenure-track positions at the rank of Assistant Professor. Candidates must have a Ph.D. and/or M.D. and have at least two years of postdoctoral training. Training and experience teaching one or more of gross anatomy, histology, embryology, and neuroanatomy is required. The candidate will be expected to have strong research training and undertake an independent research program. Current research activities within the department include neurobiology, functional morphology, and cell biology. The successful applicant will be expected to compete for external research and salary support during the initial appointment and to participate in undergraduate and graduate teaching programs of the department.

Applicants should submit a curriculum vitae, copies of three recent publications, a one- to two-page statement outlining their research plans, and the names of three references to:

Dr. David A. Hopkins, Professor and Head
Department of Anatomy and Neurobiology
Faculty of Medicine
Sir Charles Tupper Medical Building
Dalhousie University
Halifax, Nova Scotia B3H 4H7 Canada

Closing date for receipt of applications will be September 30, 1999, or until the positions are filled. The Appointments, Tenure, and Promotions Committee will commence reviewing applications after the closing deadline. *Dalhousie University is an Employment Equity/Affirmative Action Employer. The University encourages applications from qualified Aboriginal Peoples, persons with a disability, racially visible persons, and women. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.*

FACULTY POSITION ANATOMY AND CELL BIOLOGY UNIVERSITY OF NORTH DAKOTA School of Medicine and Health Sciences

Applications are invited for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level to begin January 1, 2000. This position requires expertise in human histology and developmental anatomy, and cell biology. The successful candidate will be expected to contribute to team-taught courses for graduate and medical students in those fields. Candidates must have a Ph.D., M.D., or equivalent with at least two (2) years of postdoctoral training. Research experience in developmental biology, cell and molecular biology, and/or related fields is preferred. The successful applicant will be expected to carry on a vigorous research program supported by extramural funds. Review of applications will begin on September 1, 1999, and continue until the position is filled. Candidates should send a curriculum vitae, descriptions of research and teaching experience, and names of three (3) individuals willing to serve as references to: **Dr. Edward C. Carlson, Search Committee Chair, Department of Anatomy and Cell Biology, Box 9037, University of North Dakota School of Medicine and Health Sciences, Grand Forks, ND 58202.** *The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

BIOTECHNOLOGY/LAW CLERK

Exciting opportunity for a Ph.D. in biotechnology to apprentice with Reston, Virginia intellectual property law firm. Strong writing, communication, and computer skills required. Join a firm where excellence is the norm!

Respond to: Law Clerk, P.O. Box 2610, Reston, VA 20191. Visit our website: <http://www.gbpatent.com>.

POSITIONS OPEN

CURATOR OF THE HERBARIUM AND ASSISTANT PROFESSOR OF PLANT MOLECULAR SYSTEMATICS

The University of Alaska Fairbanks (UAF) Museum and Department of Biology and Wildlife seek qualified applicants for a tenure-track position as Curator of the Herbarium and Assistant Professor.

The appointee is expected to curate and develop the herbarium, teach one course per year (systematic botany or course in an area of specialty), supervise graduate students, and establish a vigorous, extramurally funded research program complementing evolutionary and plant biology at UAF. The herbarium comprises the largest collection of Alaska vascular plants. Available facilities (website: <http://mercury.bio.uaf.edu>) include core DNA laboratory, spatial ecology laboratory, supercomputer, a modern greenhouse, and collaboration with the Bonanza Creek Long-Term Ecological Research site. Applicants with experience in managing and using traditional museum collections; a background in comparative biology and theory of phylogenetic analysis; and experience in using molecular techniques are preferred. A completed Ph.D. is mandatory and postdoctoral experience is preferred.

A Collection Manager, laboratory space, and start-up funds are included. The appointment should begin in August 2000. Send applications including statements of research interest, teaching philosophy, and curatorial experience, curriculum vitae, and three letters of reference by September 3, 1999, to: **Dr. A. Dave McGuire, Chair, Curator of Herbarium Search Committee, Biology and Wildlife Department, University of Alaska Fairbanks, Fairbanks, AK 99775-7000. Telephone: 907-474-7656; FAX: 907-474-6967; e-mail: fadam@uaf.edu.**

The University of Alaska is an Equal Employment Opportunity and Affirmative Action Employer.

SENIOR OPENING IN MARINE/AQUATIC BIOLOGY AT FLORIDA ATLANTIC UNIVERSITY

ASSOCIATE or FULL PROFESSOR position in marine/aquatic biology is available in the Division of Science at Florida Atlantic University's Davie Campus. We seek an individual deeply committed to both research and teaching whose particular area of expertise includes freshwater, marine, or estuarine systems. The successful candidate will be expected to contribute to upper-level undergraduate and graduate biology programs allied to the area of specialization, to actively participate in and enhance collaborative projects at the local, state, and federal levels, and to continue to maintain a dynamic extramurally supported research program. The ideal individual will have an exemplary publication record, evidence of sustained funding, and a strong commitment to undergraduate research and education. Preference will be given to individuals whose research provides an ecosystem perspective. The position starts August 1999. Interested scientists should submit a letter of application, curriculum vitae, three (3) letters of recommendation, and five (5) representative publications to: **Dr. John C. Volin, Search Committee Chair, Division of Science, Florida Atlantic University, 2912 College Avenue, Davie, FL 33314** by August 12, 1999.

Florida Atlantic University is an Equal Opportunity/Affirmative Action Institution.

UNIVERSITY OF FLORIDA

Seeks **ASSISTANT/ASSOCIATE PROFESSOR** in the Department of Medicine Division of Cardiology. M.D. degree, Board-certified/Board-eligible in cardiology. A full-time tenure-track position, with expertise in echocardiography. Responsibilities will include primarily attending in echocardiography laboratory, also some consultation and inpatient responsibilities. Salary and benefits commensurate with experience. Please reply with curriculum vitae to: **Janet Lewis, M.D., Associate Professor, Division of Cardiology, Box 100277, JHMHC, Gainesville, FL 32608.** Recruiting deadline: July 29, 1999, anticipated start date: September 3, 1999. *An Equal Opportunity/Affirmative Action Employer.*

Serono Pharmaceutical Research Institute



The Institute is an affiliate of The Ares-Serono Group, which has its Executive Headquarters in Geneva and is a leading multinational engaged in research, development and marketing of products in the biotechnology field. The Institute, headed by Dr. Timothy Wells, is a state-of-the-art centre of scientific excellence. Its research is directed towards the identification of novel molecular mechanisms underlying disease and the discovery of new drugs.

POSTDOCTORAL FELLOWSHIPS

are available in the Departments of Cellular Biochemistry and Biotechnology working within research teams studying molecular mechanisms controlling cellular apoptosis (Dr. Jean-Claude Martinou), signal transduction through kinases and phosphatases (Dr. Steve Arkinstall) and structural determination of key proteins involved in these processes (Dr. Jeff Shaw). Applications are invited from highly motivated and creative individuals.

Within the apoptosis group the successful postdoctoral fellow will work on key molecular questions relating to neuronal apoptosis and the involvement of mitochondria in this process. Applicants must have a Ph.D., M.D. or Ph.D.-M.D. Experience in the biology of mitochondria will be advantageous. The responsibilities will include the identification of novel molecular mechanisms by which mitochondria can signal neuronal death. The successful candidate will be expected to publish.

Informal enquiries should be sent to Dr. Jean-Claude Martinou (jean-claude.martinou@serono.com).

Within the signal transduction team the successful postdoctoral fellow will work on key molecular questions relating to growth factor and cytokine activated kinases and their control by members of the protein tyrosine phosphatase gene family. The candidate must have strong background in cellular biochemistry and/or molecular biology, preferably with previous experience with signal transduction. Applicants must have a Ph.D., M.D. or Ph.D.-M.D. Responsibilities will include the identification and study of specific molecular targets for protein tyrosine phosphatase action. The successful candidate will be expected to publish.

Informal enquiries can be directed to Dr. Steve Arkinstall (steve.arkinstall@serono.com) or Dr. Rob Hooft (rob.hooft@serono.com).

Within the protein structure group, the successful postdoctoral fellow will apply x-ray crystallography to the *de novo* determination of protein structure. Applicants with a Ph.D. must have a strong background (3–4 years) in protein crystallisation and x-ray crystallography, preferably with some previous experience in protein expression and purification. Hands-on experience in basic molecular biology would be a plus. Responsibilities include the purification and crystallisation of proteins, resolution of the structures, analysis of the structures by site-directed mutagenesis and/or the study of the structure with bound substrates or inhibitors. The successful candidate will be expected to publish his/her results in high impact scientific journals. This position requires an active and close interaction with the Institute's other departments, such as cellular biochemistry, molecular biology and chemistry.

Informal enquiries can be sent to Dr. Jeff Shaw (jeffrey.shaw@serono.com).

If you are interested, please quote the position applied for, the contact name and send your curriculum vitae with a list of publications and the names of three referees to the Personnel Department of the Institute.

Serono Pharmaceutical Research Institute

Ares-Serono International S.A.

14, chemin des Aulx
1228 Plan-les-Ouates
Geneva /Switzerland

Telephone
+41 22 706 96 66

Telefax
+41 22 794 69 65



The USDA, Agricultural Research Service (ARS), Food Safety and Health Research Unit, Western Regional Research Center, Albany, California is accepting applications for the position of **RESEARCH MICROBIOLOGIST** or **PLANT PHYSIOLOGIST**, (GS-11/12, depending on experience; \$42,673 to \$66,488, plus benefits). The incumbent will be a Permanent Scientist in a laboratory performing research within a broad project addressing the biology of bacterial human pathogens in food, especially fruits and vegetables. The overall project involves the study of the mechanisms involved in the introduction, survival, detection, identification, and virulence of human pathogens in food, especially fruits and vegetables. The incumbent will be part of a project to develop surrogate strains and methods for monitoring the transfer of microbes under simulated field conditions and for testing innovative new strategies for limiting the presence and virulence of pathogens in food. The incumbent defines approaches, and plans experimental procedures, on aspects of the project involving (1) development of new methods for collecting, culturing, identifying, and tracking microorganisms present in food or on plants; (2) molecular characterization of plant-microbe interactions; (3) field studies of the effect of plant microflora and growth conditions on plant physiology. Degree required in microbiology, plant physiology, or related degree. Plus graduate degree—Ph.D. or equivalent Doctoral degree preferred; or one year of specialized experience in the study of microbes in manure/compost. *Candidates must be a U.S. citizen.* A complete copy of the vacancy announcement and where to apply can be found at <http://www.ars.usda.gov/afm/hrd/resjobs/index.html>; select announcement ARS-D9W-9364; or contact **Personnel**, Telephone: 510-559-6014. Closing date for applications is August 23, 1999. For information, contact: **Stacey R. Pascoe, USDA, ARS, Western Regional Research Center, Albany, CA 94710. Telephone: 510-559-5610; e-mail: spascoe@pw.usda.gov.** *USDA/ARS is an Equal Opportunity Provider and Employer; women and minorities are encouraged to apply.*

PRINCIPAL INVESTIGATOR POSITIONS

Southeast Poultry Research Laboratory, Agricultural Research Services, USDA has two permanent full-time positions available for Ph.D. or Ph.D.-D.V.M. scientists. The first position is for a **MOLECULAR BIOLOGIST/GENETICIST** with experience in microbiology, molecular biology, biochemistry, or genetics. The incumbent will utilize modern molecular approaches to conduct basic and applied research examining *Salmonella enteritidis* ecology. The second position is for an **IMMUNOLOGIST/VIROLOGIST** with experience in immunology, virology, microbiology, or molecular biology. The incumbent will conduct basic and applied research on the immunologic aspects of avian influenza and Newcastle disease virus. The ideal candidates will have a Ph.D. or Ph.D.-D.V.M. and postdoctoral research experience with evidence of recent peer-reviewed publications. Southeast Poultry Research Laboratory is a rapidly growing, dynamic research laboratory with over 18 scientists forming a diverse interdisciplinary team working on established and emerging disease threats to the U.S. poultry industry. Salary commensurate with experience (\$47,891 to \$87,489). *United States citizenship required.* For further information on the research programs and/or positions contact by telephone or by mail: **Dr. David Swayne, 934 College Station Road, Athens, GA 30605. Telephone: 706-546-3434.** For further information of application procedures, contact: **Ms. Genell Powers, Telephone: 706-546-3029.** Applications must be postmarked by August 2, 1999. *The USDA is an Equal Opportunity Employer and Provider.*

CENTER FOR AGING, GENETICS, AND NEURODEGENERATION MASSACHUSETTS GENERAL HOSPITAL

The new Center for Aging, Genetics, and Neurodegeneration at Massachusetts General Hospital and Harvard Medical School is recruiting for three positions: (1) High-Throughput Drug Screening Laboratory. New **FACULTY** or **RESEARCH SCIENTIST** to direct the development of high-throughput microarrays that can be used to screen for new therapies for neurodegenerative disorders. (2) Protein Neurochemistry Laboratory. New **FACULTY** or **RESEARCH SCIENTIST** to develop a protein chemistry laboratory. The purpose of this new laboratory is to advance our understanding of abnormal protein behavior (e.g., expression, folding, and trafficking) in the neurodegenerative diseases. (3) Transgenic Animal Facility for Neurodegenerative Diseases. New **FACULTY** or **RESEARCH SCIENTIST** to develop transgenic animal approaches to neurodegenerative diseases including behavioral and molecular assessments. Each Center laboratory will interact closely with other laboratories and scientists investigating the basic neurobiology of neurodegenerative diseases. Applications with curriculum vitae and the names and addresses of three professional references familiar with the candidate's qualifications should be submitted by September 15, 1999, to:

Anne B. Young, M.D., Ph.D.
Chief, Neurology Service, VBK-9
Massachusetts General Hospital
Boston, MA 02114

Salaries and academic appointments will be commensurate with experience. *The Massachusetts General Hospital is an Equal Opportunity Employer.*

RESEARCH COORDINATOR DEPARTMENT OF ANESTHESIOLOGY

The Department of Anesthesiology of the University of Tennessee, Graduate School of Medicine, Knoxville is recruiting a full-time Research Coordinator for basic research related to anesthesiology. Ph.D. preferred; will consider Master's of Science degree. Experience in anesthesia-related research required. This position is an **ASSISTANT** or **ASSOCIATE PROFESSOR** in the non-tenure track. Rank will be determined based on qualifications and background. Please send curriculum vitae to: **Steve A. Morris, M.D., Chairman, Department of Anesthesiology, 1924 Alcoa Highway, Box U109, Knoxville, TN 37920.** *An Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.*

MEDICAL WRITERS

Looking for a new career opportunity, love science and medicine, but want to do more with the business side of your brain? Leading medical company based in New York City has an immediate opening for Medical Writers. Familiarity with development of biological/biomedical sciences manuscripts essential. Ph.D. or advanced degree in the biological sciences preferred. The ability to write clearly and concisely is essential. You will be expected to work on your own initiative, interface with Physicians, clients, and Program Directors. Some travel may be required. Please send résumé to: **Human Resources Department, 12th Floor, 16 West 22nd Street, New York, NY 10010.**

NEUROSCIENTIST to join in multidisciplinary studies of the cellular, molecular, and neuroanatomical substrates by which intrinsic central nervous system networks protect against ischemic, excitotoxic, or inflammatory injury of brain. A background in cellular, systems, and/or developmental neuroscience with strong cytochemical/neuroanatomical orientation desired. **POSTDOCTORAL** to **ASSISTANT PROFESSOR** level depending on background/experience. Contact: **D. J. Reis, Division of Neurobiology, Weill Medical College of Cornell University, 411 East 69th Street, New York, NY 10021. E-mail: djreis@mail.med.cornell.edu.** *Equal Employment Opportunity/Affirmative Action/Minorities/Females/Disabled/Veterans.*



DIRECTOR

TULANE UNIVERSITY REGIONAL PRIMATE RESEARCH CENTER

Tulane University Medical Center in New Orleans, Louisiana invites nominations and applications for the position of Director of the Tulane Regional Primate Research Center. The position is open to qualified Doctoral-level candidates with a proven research record and experience and achievement in a field relevant to primate research. Applicants should have administrative and leadership experience in coordinating basic and applied research. Strong emphasis will be placed on the candidate's ability to build on the resources of the Medical Center, which includes a School of Medicine, a School of Public Health and Tropical Medicine, and a multidisciplinary hospital and clinic in addition to the Primate Research Center. The successful candidate will be expected to act as a liaison with federal agencies, including the National Center for Research Resources, other units of the university, and the private sector. Tulane's institutional commitment and currently active research projects in primate research offer an excellent opportunity to establish a strong integrated program that can attract extramural funding and achieve national prominence as a center of excellence for primate research. Current areas of research emphasis at the Primate Research Center include parasitic and infectious diseases and gene therapy.

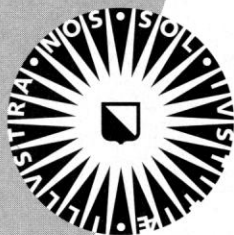
Nominations should be sent to **Dr. Paul Whelton**, Chair of the Search Committee at the address listed below. Applicants should send a complete curriculum vitae and the names of at least three references to:

Paul K. Whelton, M.D., M.Sc.
Chair, Primate Research Center Directorship
Search Committee
Office of the Chancellor, SL 76
Tulane University Medical Center
1430 Tulane Avenue
New Orleans, LA 70112

Tulane is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and members of minority groups.

ASSISTANT UNIT LEADER FOR WILDLIFE ALASKA COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT University of Alaska Fairbanks

The position is open to all qualified applicants *who are U.S. citizens* and is a permanent 12-month position with U.S. Geological Survey. The incumbent will hold joint appointments in the Department of Biology and Wildlife and the Institute of Arctic Biology (IAB) with a faculty rank commensurate with experience. Applicants must have an earned Ph.D. in wildlife ecology, conservation biology, or a closely related discipline. Postdoctoral experience, a strong record of extramural funding, the ability to supervise graduate students, and to interact favorably with state and federal wildlife agencies are expected. The incumbent will design, direct, and conduct research related to conservation biology and wildlife ecology and management with emphasis on arctic and subarctic ecosystems. The position is primarily research with a teaching load of one graduate course per year. Extensive research support is available at the Large Animal Research Station, Toolik Field Station, Spatial Ecology Laboratory, the DNA Core Facility, and the UAF Museum. Complete job description is available at <http://mercury.bio.uaf.edu/~bgriffit.faculty/AUL-wildl/AUL.html>. Contact: **Brad Griffith, 209 Irving I, University of Alaska Fairbanks, Fairbanks, AK 99775. E-mail: ffdgb@uaf.edu; Telephone: 907-474-5067** regarding nature of the position, closing date, position number, and application procedures. Application must be submitted to: **U.S. Geological Survey, Human Resources Office, 345 Middlefield Road, MS-612, Menlo Park, CA 94025. Telephone: 603-329-4120.**



Universiteit Utrecht

Faculty of Earth Sciences

Faculty and Postdoctoral Positions in Geochemistry

The Faculty of Earth Sciences at Utrecht University (The Netherlands) is seeking to fill up to three tenure-track faculty positions in Geochemistry at the rank of Assistant Professor. Applications are welcome from qualified candidates in the following, broadly-defined, areas: Organic Geochemistry, Geomicrobiology, Biogeochemistry, Marine Geochemistry, Chemical Oceanography, Aquatic Geochemistry, Geochemical Kinetics, and Reactive Transport Modelling. We are particularly interested in applicants who are at the forefront of new developments in one or several of the aforementioned fields of research.

Candidates should hold a Ph.D. at the time of appointment. They will be expected to rapidly establish an independent, externally-funded research program. A strong commitment to quality teaching at the undergraduate and graduate level is also required. Applicants not familiar with Dutch must be prepared to develop a working knowledge of the language within 2 years. Appointments could start as early as January 1, 2000.

Applications are also sought for a postdoctoral research position, starting in the fall of 1999. The successful candidate will participate in ongoing studies of the biogeochemistry of redox-stratified environments. Candidates with a background in dynamic modelling or experimental (bio)geochemical kinetics are encouraged to apply.

The Faculty of Earth Sciences offers undergraduate and graduate degree courses in Geology, Geochemistry and Geophysics. It comprises a total of 37 permanent academic staff, approximately 60 Ph.D. students and postdocs. State-of-the-art analytical, experimental and computational facilities are available. Existing research programs in

the Geochemistry Department focus on Environmental Geochemistry, Soil Chemistry, Hydrogeochemistry, Chemical Oceanography, Organic Geochemistry, Trace Element Geochemistry, and Engineering Geochemistry. The advertised positions coincide with the appointment of Dr. Philippe Van Cappellen as Professor of Geochemistry.

Appointments to the advertised faculty positions will be at a level equivalent to Assistant Professor and will be initially for 2 years with the possibility of subsequent tenure, depending on performance.

Gross salary will be commensurate with experience and ranges from Dfl. 3,990.– to Dfl. 8,429.– per month.

The postdoctoral position will be for 2 years. Gross salary will be commensurate with experience and ranges between Dfl. 3,990.– and Dfl. 6,326.– per month.

Salaries are paid on a 12 months per year basis and are supplemented by an annual holiday bonus of 8% gross.

Questions regarding all positions should be addressed by e-mail to pvc@geo.uu.nl. Applicants for the faculty positions should send a resume, a list of publications, a statement of research and teaching objectives and the names and addresses of three references. Applicants for the postdoctoral position should send a concise statement describing research interests and long-term career objectives, a resume, a list of publications, and the names and addresses of three references.

All applications should be sent to the Personnel Department, Faculty of Earth Sciences, Budapestlaan 4, 3584 CD Utrecht, The Netherlands.

Please quote reference number 95907 (faculty positions) and 95908 (postdoctoral position).

Utrecht University is committed to employment equity, and strongly encourages applications from qualified women.

POSITIONS OPEN

INTEGRATED ORCHARD MANAGEMENT SYSTEMS SPECIALIST. The College of Agricultural and Environmental Sciences, University of California, Davis invites applications and nominations for a 100-percent **ASSISTANT SPECIALIST** in cooperative extension in the Department of Pomology. Candidates will be expected to evaluate and extend research-based information that incorporates principles of sustainable production into Integrated Crop Management Systems for perennial fruit and nut crops in California, and function as the Lead Specialist for cooperative extension programs associated with almond and walnut production. Candidates must have a Ph.D. degree in ecology, horticulture, agronomy, soil science, plant nutrition, water science, or closely related discipline; demonstrated ability or potential to conduct independent research in agricultural systems; commitment to effective outreach; excellence in written and oral communication; a record of scholarly and academic achievement; computer literacy; the ability to work effectively with extension colleagues, faculty, staff, and numerous clientele groups. Applicants should send (1) a curriculum vitae, (2) transcripts if less than five years since graduation, (3) copies of published and in-press articles, (4) a description of current and projected extension and research interests relative to this position, (5) a summary of teaching interests and experience, and (6) names and addresses of at least three references from whom letters of reference may be requested to: **Prof. Steven A. Weinbaum, Chair, Integrated Orchard Management Systems Search Committee, Department of Pomology, One Shields Avenue, University of California, Davis, CA 95616-8683.** All application materials must be received by October 15, 1999, to be assured full consideration. For additional information about the department visit our website: <http://pom.ucdavis.edu> or website: <http://fruitsandnuts.ucdavis.edu>. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ANIMAL PHYSIOLOGIST

Towson University invites application for a tenure-track Assistant Professor effective January 2000. Position involves teaching one to two courses per semester including histology and other anatomy and physiology offerings. Successful candidate expected to establish extramurally funded research program involving undergraduates and M.S. candidates; all subdisciplines considered, preference for cell signaling research. Salary and teaching load competitive with peer institutions. Ph.D. required; postdoctoral experience preferred. Send curriculum vitae, all transcripts, one-page statements of teaching and research interests, and two letters of reference to:

Jay A. Nelson, Chair
Physiology Search Committee
Department of Biological Sciences
Towson University
Towson, MD 21252 USA
E-mail: jnelson@towson.edu

Review of applications begins August 16, 1999. Electronic materials should also be submitted on disk or via e-mail to dreuther@towson.edu. Additional information at website: <http://www.towson.edu/biology>. *Towson University is an Equal Opportunity/Affirmative Action Employer with strong institutional commitment to diversity. Women, minorities, persons with disability, and veterans encouraged to apply.*

MEDICAL SCIENCE WRITER/EDITOR

Position includes writing about medical research and clinical topics for lay readers and writing/editing copy for Physicians, other health care professionals, and basic researchers. Minimum requirements include a Bachelor's degree in English, journalism, scientific/medical writing, health sciences, or related field plus three years of experience or the equivalent. Strong writing, interviewing, and interpersonal skills are a must. Prefer M.S./A.B.D./Ph.D. in the biomedical sciences. Qualified applicants should send three copies of their résumé and two to three writing samples to: **UPMC Health System, Human Resources Department, Attn: VJH, 200 Lothrop Street, Pittsburgh, PA 15213-2582.** *Equal Opportunity Employer.*

POSITIONS OPEN

CHILD NEUROLOGIST. The Department of Neurology and Neurological Sciences and the Department of Pediatrics at Stanford University School of Medicine seek to recruit an academic Child Neurologist who will participate in programs of patient care, teaching, and investigation at Lucile Salter Packard Children's Hospital at Stanford. Candidates must be Board-certified or -eligible in child neurology. A clinical subspecialty focus in motor disorders or neurogenetics is desirable. The appointment will be at the rank of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** in either the Medical Center Line or in the University Tenure Line. Faculty in the Medical Center Line are expected to build an outstanding program of clinical care, teaching, and clinical research. In the University Tenure Line, faculty are engaged primarily in basic science or clinical research; they are expected to establish superb, well-funded research programs. Applicants and nominations should be directed to: **William C. Mobley, M.D., Ph.D., Professor and Chairman, Department of Neurology and Neurological Sciences, MSLS Building, Room P211, 1201 Welch Road, Stanford University Medical Center, Stanford, CA 94305-5489.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

SCIENTIFIC PROGRAM OFFICER for drug discovery. Exciting position available at new nonprofit foundation dedicated to drug discovery in Alzheimer's disease. Scientific Officer will assist in program development and oversight. Candidate will have Ph.D. in neuroscience or related field with experience in central nervous system/Alzheimer's disease research. Experience with drug discovery and development will be a vital asset. Position requires considerable travel to identify worthwhile drug discovery projects for funding in both academic and biotechnology industry and site visits of funded programs. Ability to communicate well and represent the organization nationally and internationally is crucial. Salary commensurate with experience.

Please contact:

Howard Fillit, M.D.
Executive Director
The Institute for the Study of Aging
767 Fifth Avenue, Suite 4200
New York, NY 10153
E-mail: hfillit@rslmgmt.com

MICROBIAL BIOTECHNOLOGIST

The Institute for Microbial and Biochemical Technology is seeking a permanent, full-time **RESEARCH SCIENTIST**. The successful candidate will establish an independent research and development program to discover and implement novel enzymes or microbial processes that underlay technologies for improving utilization of wood or wood fiber. Preferred applicants will have completed all requirements for a Ph.D. degree in an appropriate field. Demonstrated fundamental research productivity in enzyme or microbial bioprocess applications is essential for this position. Applications must be postmarked by August 27, 1999. Contact: **Ms. Ginny White, Forest Products Laboratory, One Gifford Pinchot Drive, Madison, WI 53705-2398.** Telephone: 608-231-9270; e-mail: vwhite@fpl.fs.fed.us. Additional information may be obtained online at website: <http://www.usajobs.opm.gov/wfjc/jobs/IF1414.HTM>. Announcement FPL-99-11D. *The USDA is an Equal Opportunity Provider and Employer.*

POSTDOCTORAL POSITIONS now open in cellular and molecular endocrinology to study role of nuclear receptors and JAK/STAT signaling in the control of liver gene expression (website: <http://bio.bu.edu/html/x23213.html>). Experience in molecular biology, cell biology, or biochemistry preferred. Flexible start date. Send curriculum vitae, summary of research experience, select publications, and names of references to: **David J. Waxman, Ph.D., Department of Biology, Boston University, 5 Cummington Street, Boston, MA 02215.** E-mail: djw@bio.bu.edu.

POSITIONS OPEN

CALTECH POSTDOCTORAL SCHOLARS PROGRAM AT JET PROPULSION LABORATORY

The California Institute of Technology (Caltech) Postdoctoral Scholars Program at the Jet Propulsion Laboratory (JPL) invites applicants to apply for Postdoctoral Research positions in the Astrobiology Research Element at JPL. In addition to independent research, the successful candidates will support an independent, broad-based program of research on astro/exobiology.

Candidates should have a recent Ph.D. in biology or physics. Annual starting salary for a recent Ph.D. is approximately \$42,000 and can vary somewhat according to the applicant's qualifications. Postdoctoral Scholars positions are awarded initially for a one-year period and are contingent on evidence of completion of the Ph.D. degree. Appointments may be renewed in one-year increments for two additional years. The appointment is expected to begin in early September 1999.

Please send a curriculum vitae, statement of research interests, and a list of at least three references to: **Dr. Kenneth Nealson, Jet Propulsion Laboratory, Mail Stop 183-301, 4800 Oak Grove Drive, Pasadena, CA 91109.** Telephone: 818-354-9219; FAX: 818-393-4445; e-mail: kenneth.h.nealson@jpl.nasa.gov.

The California Institute of Technology and the Jet Propulsion Laboratory are Equal Opportunity/Affirmative Action Employers. Women, minorities, veterans, and disabled persons are encouraged to apply.


Several **POSTDOCTORAL POSITIONS** are available immediately to work in the Laboratory of Molecular and Developmental Biology in the National Eye Institute, National Institutes of Health. The research involves developmentally regulated, tissue-specific expression of multifunctional enzyme and crystallin genes in the lens and/or cornea as well as other tissues. This group is also investigating the multiple functions and disease associations of these enzyme-crystallins. Mice, zebrafish, and several invertebrates are presently being used. Methodologies include cloning, expression, and molecular analyses of cDNAs and genes, and production and utilization of transgenic mice, gene knockout mice, and transfected cells. *Candidates must be U.S. citizens or permanent residents and have a Ph.D. or M.D. degree.* Salary begins at \$30,000 and increases depending on experience. Please send curriculum vitae and the names of three references to: **Dr. Joram Piatigorsky, Laboratory of Molecular and Developmental Biology, Building 6, Room 201, Bethesda, MD 20892-2730.** FAX: 301-402-0781; e-mail: joramp@intra.nei.nih.gov. *NIH is an Equal Opportunity Employer.*

WILDLIFE SCIENTIST

A full-time research position is available at the **ASSISTANT SCIENTIST** (Ph.D.) level in wildlife biology. The successful candidate is expected to develop a broad program of study on the ecology and humane management of white-tailed deer. Applicants should submit a letter of application, a curriculum vitae, transcripts, reprints, and a list of three references to: **Dr. Kirby Stafford, Chief Scientist, Department of Forestry and Horticulture, Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, CT 06504.** Telephone: 203-974-8485; e-mail: kirby.stafford@po.state.ct.us. Closing date for applications is 1 September 1999 or until a suitable candidate is found. *An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

BIOCHEMIST/MOLECULAR BIOLOGIST

We seek Ph.D., M.S., or B.S. Biochemists/Molecular Biologists. Candidates will manage laboratory/technology affairs. Review our website: <http://www.genotech.com> for further information about our innovative products. Send résumé to: **Geno Technology, Inc., 3047 Bartold Avenue, St. Louis, MO 63143.**



New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal, one of the European Pharmaceutical Research Centres of Parke-Davis located in the southern region of Paris. In our research centres, in Ann Arbor (USA), Cambridge (UK) and Fresnes (FR), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases. Our present goal is to expand and build new teams at IRJ, in France, working closely with our international teams. We are currently recruiting a

l'alliance ouvre les portes de la découverte


**Senior Scientist
Functional Genomics**

This position has been established to join a team, within the Cell and Molecular Biology Department which will use functional genomics to understand the processes that control inflammation and immune response. The applicants should have a PhD, with minimum 2 years of postdoctoral experience, with theoretical and practical proficiency.

The ideal candidate will have experience in Molecular Techniques relevant to functional genomics and/or immunology relevant to inflammation, hands on experience with one or more of the following technologies : cDNA cloning, cDNA selection, exon trapping, DNA sequencing, computational genomics, transcriptional profiling. Additional experience in gene expression, expression cloning, basic mammalian tissue culture techniques, YAC, BAC, PAC analysis, would be preferred.

The selected candidate will have sense of innovation, independence in short range project planning and ability to work in a team environment.


For confidential consideration, please send your resume and your references, quoting reference GEN/SC, to Marie-Aude Julien, Institut de Recherche Jouveinal/Parke-Davis, Human Resources Department, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France. Fax : (33.1) 40 96 77 32

 **PARKE-DAVIS** PHARMACEUTICAL RESEARCH
Investing in France for the future

A Division of **WARNER LAMBERT**

BDP CORPORATE

Forschungszentrum Jülich



The Research Centre Jülich is operated jointly by the German Federal Government and the North Rhine-Westphalian State Government. It has a staff of about 4.300 and is a member of the Hermann von Helmholtz Association of German Research Centres (HGF). Our five interdisciplinary research activities are Materials Science and Structure of Matter, Information Technology, Life Sciences, Environmental Research and Energy Technology.

For our **Institute of Medicine** we are looking for a Neuroscientist (Medical Scientist, Scientist) as

Director (C4)

The central research theme of the Institute of Medicine is the application of modern imaging methods to questions of neuroscience. The research should also advance the diagnosis and therapy of brain diseases. The facilities available in the institute include Positron Emission Tomography (PET), Single Photon Emission Computer Tomography (SPECT), functional Magnetic Resonance Imaging (fMRI), Magnetoencephalography (MEG), modern autoradiography as well as an extensive laboratory space.

Close cooperation with the Institute of Nuclear Chemistry (radiopharmacy, radiopharmacology) as well as with the Central Institutes of Electronics and of Mathematics (John von Neumann Institute) provides the basis for the further development of these techniques. Interdisciplinary work involving molecular genetics, structural biology, enzyme technology and biotechnology is possible in the area of brain research by cooperation with other institutes of the Research Centre. The research work is strengthened through close connections to neighbouring universities.

It is foreseen that each Director will, in a joint procedure with the Heinrich Heine University Düsseldorf, be appointed to a University chair from where he/she will be seconded to take on his/her responsibilities at the Research Centre Jülich. The salary will conform to the C4 (full professor) scale of universities. Candidates are required to have "Habilitation" or equivalent qualifications, the ability to lead an institute and to take part in teaching. The Research Centre Jülich would like to increase the number of women in leading positions and therefore qualified women are especially encouraged to apply. Applications including a curriculum vitae, list of publications and a brief summary of scientific achievements should be submitted by 15 October 1999 to

**Vorstand der Forschungszentrum Jülich GmbH
D-52425 Jülich, Germany**

POSITIONS OPEN

POSTDOCTORAL POSITION COLUMBIA UNIVERSITY

Position available immediately to study molecular mechanisms of complex disorders with emphasis on eye diseases. Incumbent will be expected to carry out research on ABC transporters involved in human inherited diseases and on genetic variation in candidate genes for Mendelian and complex disorders utilizing high-throughput genotyping methods. Interested Ph.D.'s and/or M.D.'s with a strong background in molecular genetics or genomics who wish to become a part of a dynamic, growing laboratory, should send curriculum vitae and names of three references to: **Rando Allikmets, Ph.D., Department of Ophthalmology, Columbia University, Eye Research Addition, 2nd Floor, 630 West 168th Street, New York, NY 10032. FAX: 212-305-7014. Columbia University takes Affirmative Action toward Equal Employment Opportunity.**

POSTDOCTORAL/ASSOCIATE RESEARCH SCIENTIST POSITIONS MOLECULAR BASIS OF CANCER

Positions available to join research group cloning and characterizing novel genes mediating tumorigenesis, cancer progression and suppression, apoptosis, and cell differentiation. Training in molecular biology, emphasizing gene cloning, transgenic mice, protein analysis and purification, or protein-protein interactions. Send curriculum vitae and three references to: **Dr. P. B. Fisher, Columbia University, College of Physicians and Surgeons, BB 15-1501, 630 West 168th Street, New York, NY 10032. FAX: 212-305-8177; e-mail: pbf1@columbia.edu. Columbia University takes Affirmative Action toward Equal Employment Opportunity.**

POSTDOCTORAL POSITION VIROLOGY/EXPERIMENTAL MEDICINE HARVARD MEDICAL SCHOOL Beth Israel Deaconess Medical Center

Postdoctoral positions available to study (1) the biology of gamma herpesvirus (EBV, KSHV) entry and to develop virus-based approaches to tumor therapy.

Recent Ph.D. or M.D. graduates with skills in molecular/cellular biology or biochemistry. *U.S. resident, an advantage.* Please send curriculum vitae and three references to: **Dr. Joyce Fingerroth, Harvard Institute of Medicine-353, 4 Blackfan Circle, Boston, MA 02115. E-mail: jfingerro@caregroup.harvard.edu.**

POSTDOCTORAL FELLOW to study the mechanisms used by embryonic fibroblasts and tumor cells to invade and move through extracellular matrix. The role of the cytoskeleton is evaluated by fluorescent probes and a variety of experimental approaches, of which live confocal microscopy is the most important. The role of signal transduction is studied by transfection of appropriate probes. Also involved are light and electron microscopy, immunohistochemistry, biochemistry, and culture of primary embryonic cells and tumor cell lines. Send curriculum vitae and names of references to: **Dr. Elizabeth Hay, Department of Cell Biology, Harvard Medical School, 220 Longwood Avenue, Boston, MA 02115. E-mail: ehay@hms.harvard.edu.**

POSTDOCTORAL POSITION available immediately in a NIH-funded laboratory studying the cellular and molecular aspects of host-parasite interaction in the skin with particular emphasis on the role of antigen-presenting cell and cytokines. Ph.D. and experience in cellular immunology is essential. Please send curriculum vitae to: **K. Ramaswamy, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, 1601 Parkview Avenue, Rockford, IL 61107. FAX: 815-395-5666; e-mail: ramaswamy@uiuc.edu for more information. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS

The Bunting Institute at Radcliffe, a multidisciplinary residential research center, offers Fellowships for scientists, scholars, writers, artists, or activists in any field with the receipt of a Doctorate or appropriate terminal degree at least two years prior to appointment (September 2000). Office space, auditing privileges, and access to libraries and most other resources of Harvard University are provided. Residence in the Boston Area and participation in the Institute community are required during 11-month Fellowship appointment (begins September 2000). Write, e-mail, or call for an application: **34 Concord Avenue, Cambridge, MA 02138. Telephone: 617-495-8212; e-mail: bunting_fellowships@radcliffe.edu. Application deadline (postmarked): October 1, 1999.**

POSTDOCTORAL POSITION available now to use electrophysiological methods to study the nervous system of *C. elegans*. Applicants should have a Ph.D. with a strong background in electrophysiological techniques and the desire to combine this with the extraordinary genetic resources available in this organism. Potential projects available in this vigorous and established laboratory include potassium channel function and calcium signaling *in vivo* and potassium channel structure/function. E-mail for more information to e-mail: **jht@genetics.washington.edu**. Visit the laboratory World Wide Web site at website: **http://mendel.genetics.washington.edu/~lab**. E-mail or send curriculum vitae, research summary, and three references to: **James H. Thomas, Department of Genetics, Box 357360, University of Washington, Seattle, WA 98195.**

POSTDOCTORAL POSITION PLANT MOLECULAR BIOLOGY

Postdoctoral position available immediately to study molecular basis of furanocoumarin biosynthesis in apicaceous plant foliage in relation to defense against insect herbivores. Expertise in plant molecular biology, particularly gene cloning and protein expression, required; phytochemistry background or familiarity with cytochrome P450 highly desirable. Send cover letter, curriculum vitae, and names of three references to: **Dr. M. Berenbaum, Department of Entomology, 320 Morrill Hall, University of Illinois, 505 South Goodwin, Urbana, IL 61801-3795. E-mail: maybe@uiuc.edu. The University of Illinois is an Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIPS PENN STATE COLLEGE OF MEDICINE

Positions available to study the molecular mechanisms responsible for targeting cytosolic proteins to the yeast lysosome for degradation. Applicants with backgrounds in cloning, PCR, Western blotting, and cell fractionation are strongly encouraged to apply. Send curriculum vitae and three names of references to: **Hui-Ling Chiang, Ph.D., Department of Cellular and Molecular Physiology, Penn State College of Medicine, 500 University Drive, H166, Hershey, PA 17033. E-mail: hchiang@psu.edu. Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its workplace.**

POSTDOCTORAL POSITIONS available to study molecular mechanism of mammalian mismatch repair and its impact on cancer. Multidisciplinary program focused on mechanisms of DNA repair deficiency, genomic instability, and cancer. Experience in biochemistry and molecular biology desired. Send brief description of research experience, curriculum vitae, and three references to: **Guo-Min Li, Ph.D., Department of Pathology, University of Kentucky, Lexington, KY 40536. FAX: 606-323-2094; e-mail: gmlip@pop.uky.edu.**

POSITIONS OPEN

The Laboratory of Physical Biology, Intramural Research Program (IRP) of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) of the National Institutes of Health (NIH) has a **POSTDOCTORAL POSITION** available to study the biochemistry and cell biology of the muscle and cardiac junctional protein N-RAP (*Cell Motil. Cytoskeleton* **38:75-90, 1997; Biochem.** **38:6135-6143, 1999**). Experience in protein expression/purification, binding assays, or fluorescence microscopy is desirable. Applicants should have less than five years of postdoctoral laboratory experience. Send a curriculum vitae and have three letters of recommendation sent to: **Dr. Robert Horowitz, NIAMS, NIH, Building 6, Room 408, 6 Center Drive, MSC 2755, Bethesda, MD 20892-2755. E-mail: horowitz@helix.nih.gov.**

POSTDOCTORAL POSITION available to study gene expression in mouse models of systemic lupus erythematosus and diabetes mellitus as well as using archived human biopsy material. This work will be carried out in collaboration with Argonne National Laboratory and their use of microchips to perform massively parallel DNA analysis. Work will interface contemporary molecular biological tools with experimental pathology. *Support by NIH training grant requires U.S. citizenship or permanent residence.* Send curriculum vitae, brief description of work experience, and names of three references to: **Dr. Richard Quigg, Department of Medicine, The University of Chicago, 5841 South Maryland Avenue, MC5100, Chicago, IL 60637. E-mail: rquigg@medicine.bsd.uchicago.edu. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP in electrophysiology of inner ear epithelia. These studies involve using patch clamp, vibrating probe (extracellular currents and ion fluxes), Using chamber, and molecular biologic techniques to investigate regulation of vectorial ion transport via receptors for extracellular ATP. Previous electrophysiological and/or molecular biological experience preferred. Applicants should send a curriculum vitae and reference list to: **Daniel C. Marcus, D.Sc., Anatomy and Physiology, Kansas State University, 1600 Denison Avenue, Manhattan, KS 66506-5602. E-mail: marcus@ksu.edu; FAX: 785-532-4557; website: http://www.vet.ksu.edu/depts/a&p/faculty/marcus.htm. KSU is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITIONS

Postdoctoral positions are available to investigate the regulation of lung surfactant protein expression and the structure-function analysis of proteins. A Ph.D. in biochemistry is required. Previous experience in lung surfactant biochemistry, gene expression in a mammalian system, or expression and analysis of recombinant protein is preferred. Salary commensurate with experience. Please send curriculum vitae with names and addresses of three references to: **Avinash Chander, Ph.D., Professor of Pediatrics, Division of Neonatology, Thomas Jefferson University, Suite 700, 1025 Walnut Street, Philadelphia, PA 19107. E-mail: avinash.chander@mail.tju.edu. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS available immediately to study cytoskeletal protein 4.1R. Multiple protein 4.1R isoforms are generated from a single genomic locus by several alternative splicing events leading to the inclusion or deletion of internal exons. Studies will focus on the structure-function relationships of protein 4.1R isoforms and the molecular mechanisms regulating the alternative splicing of protein 4.1R. The project is a collaboration between **Dr. Shu Huang and Dr. Edward J. Benz Jr.** Please send curriculum vitae to: **Shu Huang, 1033 Ross Research Building, Department of Medicine, Johns Hopkins University, Baltimore, MD 21205. Telephone: 410-614-4610; FAX: 410-955-0185; e-mail: schuang@welch.jhu.edu. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.**



Pharmaceuticals

Non-Clinical Pharmacokineticist

Who we are

F. Hoffmann-La Roche, one of the world's leading pharmaceutical companies, has a long-standing reputation for successful and innovative drug development. The pharmacokinetics group of the Non-Clinical Drug Safety Department in Basel (Switzerland), is responsible for characterising absorption, distribution and elimination of development compounds using state-of-the-art techniques including in vivo and in vitro models.

The position

You will work on the non-clinical pharmacokinetic characterisation of new drugs during their development. You will devise, conduct and report on in vivo and in vitro experiments to study the drug's pharmacokinetics and to predict its fate in the human body. You will act as the department's representative in international, multi-disciplinary project teams and you will frequently collaborate with other scientists involved in the development of novel therapeutic agents.

Who you are

As a highly qualified pharmacokineticist you have a strong interest in pharmacokinetic aspects of non-clinical drug development. You have a PhD in a subject related to pharmacokinetics and some years of post-doctoral experience, ideally in industry. You are highly motivated, have proven research ability and a good publications track record. Excellent interpersonal and communications skills, as well as team spirit, are essential. Good written and spoken English and familiarity with (or willingness to learn) German are expected.

Who to contact

Interested in this challenging position? Please forward your application, together with full supporting documentation, to: F. Hoffmann-La Roche Ltd, Mr Ralph Gysin, PSPB-1, 52/210, P.O. Box, CH-4070 Basel, quoting reference: Gr1925. If you need further information, please contact Dr. Wolfgang F. Richter (phone 0041-61-688 62 15).

University of Oxford

Continuing Professional Development Biosciences Programme

For researchers and managers in pharmaceutical and biotechnology companies, research and academic institutions

Introductory courses

Protein Science

7-8 September 1999

Effective Writing

4-5 October 1999

& 6-7 March 2000

Immunology

7-8 October 1999

& 24-25 April 2000

Molecular Biology and Genetic Engineering

11-14 October 1999

& 6-9 March 2000

Effective Presentations

10-11 November 1999

& 4-5 April 2000

Forthcoming Courses

Receptors, Drug Metabolism,
Biosensors, Bioinformatics,
Pharmacogenomics,
Molecular Pharmacology

Available In-house

Molecular Biology and Genetic Engineering

The Secret Lives of Cells

Effective Writing

Molecular Pharmacology

Protein Science

Immunology

Molecular Medicine

"let us bring our successful courses to
you!"

For further details contact

Rachel Bristow:

Tel: +44 (0) 1865 288162

Fax: +44 (0) 1865 288163

email: cpdbio@conted.ox.ac.uk

Web: www.conted.ox.ac.uk/courses/biosciences.html

CPD Centre, Dept Continuing Education,
University of Oxford,
67 St Giles, Oxford, OX1 3LU, UK

POSITIONS OPEN

POSTDOCTORAL POSITIONS. Available for studies in various aspects of cancer research and toxicology in the Center in Molecular Toxicology through the Departments of Biochemistry, Cell Biology, Chemistry, Medicine, and Pathology. Areas of investigation relating to toxicology and carcinogenesis are (1) enzymatic oxidation and conjugation, (2) oxidative damage, (3) DNA damage and mutagenesis, (4) regulation of gene expression, and (5) environmental pathology. Center faculty include **Dr. Richard N. Armstrong, Dr. Raymond F. Burk, Dr. Richard M. Caprioli, Dr. Raymond N. DuBois, Dr. Doyle G. Graham, Dr. F. Peter Guengerich, Dr. Thomas M. Harris, Dr. Lawrence J. Marnett, Dr. Timothy J. Meredith, Dr. Jennifer A. Pietsch, Dr. Ned A. Porter, Dr. Michael P. Stone, Dr. William M. Valentine, and Dr. Michael R. Waterman.** Salaries are negotiable. Applicants should submit curriculum vitae and three letters of recommendation to: **Dr. F. Peter Guengerich, Director, Center in Molecular Toxicology, Vanderbilt University, School of Medicine, Nashville, TN 37232-0146.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH FELLOWSHIP IN MELANOCYTE BIOLOGY

Applications are invited for an innovative and motivated scientist to investigate two fundamental properties of melanocyte biology: dendrite formation and melanosome transfer to keratinocytes. The project involves determining the signaling intermediates involved in dendrite extension, and the molecular mediators and regulatory factors involved in melanosome transfer. Excellent experience in the basic biology of melanocytes, including signal transduction, gene expression, and cell biology will be provided. Candidates should have a background in cell biology and must be U.S. citizens or permanent residents and have a Ph.D. or M.D. Please send curriculum vitae and names and addresses of three references to: **Dr. Glynis Scott, Box 697, Department of Dermatology, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, NY 14642.** E-mail: glynis_scott@urmc.rochester.edu.

POSTDOCTORAL POSITIONS available immediately to study nuclear receptor function and programmed cell death in *Drosophila*. Developmental studies include (1) ligand-dependent function of steroid-superfamily receptors and (2) action of IAP-type proteins on cell death and proliferation. Ph.D. and experience in molecular and cellular biology essential. Send curriculum vitae, names and addresses of three references to: **Marilinda Eller, at either Cellular and Molecular Biology Section, 304 Morgan Building, School of Biological Sciences or Chandler Medical Center, 306 HSRB, University of Kentucky, Lexington, KY 40506.** Equal Opportunity Employer.

POSTDOCTORAL POSITION in virology available to study the mechanisms of retrovirus and hepatitis C virus infection using innovative, high-throughput molecular and cell biological techniques. Opportunity to do rigorous science in stimulating and interactive environment. Strong background in biochemistry, molecular biology, or cell biology preferred. Send curriculum vitae, names and addresses of three references to: **Ila Singh, M.D., Ph.D., Columbia University, Department of Pathology, 630 West 168th Street, New York, NY 10032.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the pathogenesis of enteric murine coronavirus infections. Studies are focused on molecular basis of tissue tropism in coronaviruses. Experience in molecular biology, cellular biology, or virology required. Send curriculum vitae, the names of three references, and available start date to: **Susan Compton, Ph.D., Comparative Medicine, Yale University, P.O. Box 208016, New Haven, CT 06520-8016.** E-mail: susan.compton@yale.edu.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP

A Postdoctoral position is available for someone interested in using mouse genetics to identify and study genes important for intracellular vesicle transport. Our approach utilizes classical mouse mutations (i.e., *d, ash, hi, dsu, ni, ni2*) that affect vesicle transport, and reverse genetics, to identify the mutant genes. Genetic and biochemical studies are then used to elucidate the functions of these genes in the cell. Candidates should be experienced in molecular and cell biology. A background in genetics would also be beneficial.

The position is part of the Division of Basic Sciences of the National Cancer Institute and is located at the Frederick Cancer Research and Development Center in Frederick, Maryland. Salary range for this position is \$29,000 to \$32,600.

Interested candidates should submit a curriculum vitae and the names of three references to:

**Nancy A. Jenkins, Ph.D.
Mammalian Genetics Laboratory
Building 539, Room 229
NCI-Frederick Cancer Research
and Development Center
Frederick, MD 21702**

Your curriculum vitae and names of references also may be sent by FAX: 301-846-6666; e-mail: jenkins@ncifcrf.gov.

The National Institutes of Health is an Equal Opportunity Employer and encourages all qualified women and minorities to apply. Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.

POSTDOCTORAL FELLOW

An NIH-funded position is available at the University of Maryland at Baltimore to study the role of endotoxin in antibacterial host defenses. Murine models of infection will be used to study cytokine responses, LPS, and intracellular signaling as well as interactions between cell subpopulations. Applicants should have a strong background in molecular approaches to cell biology and cytokine analysis, and in working with bacteria. The position will be available for four years.

Send curriculum vitae and letter of interest to: **Dr. Alan Cross, Department of Medicine, Division of Infectious Diseases, 10 South Pine Street, Suite 900, Baltimore, MD 21201.** Telephone: 410-328-2565; FAX: 410-328-6896; e-mail: across@umcc01.umcc.ab.umd.edu.

POSTDOCTORAL POSITIONS CARDIOVASCULAR RESEARCH

The Department of Physiology and Biophysics at Case Western Reserve University has Postdoctoral positions available training under 20 well-funded faculty on the various aspects of cardiovascular research, from molecular to systemic approaches. Additional information about the Department and its faculty can be obtained from our website: <http://physiology.cwru.edu>. Applicants must be U.S. citizens or permanent residents. Send curriculum vitae and the names of three references to: **Chairman, Department of Physiology and Biophysics, 10900 Euclid Avenue, Cleveland, OH 44106-4970.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. Positions available immediately for individual with Ph.D. or M.D., to study the molecular mechanisms underlying the pathogenesis of myotonic dystrophy (DM). Areas of research include posttranscriptional gene regulation, RNA-transport, muscle development, and mouse genetics. Background in mouse genetics, and/or experience in molecular and cell biology with an interest in human disease are essential. Please send curriculum vitae, research interests, and names of three references to: **Dr. Mani S. Mahadevan, University of Wisconsin-Madison, 445 Henry Mall, Madison, WI 53706.** E-mail: msmahade@factaff.wisc.edu; FAX: 608-262-2976.

POSITIONS OPEN

POSTDOCTORAL POSITION is available to study phosphoinositide-specific phospholipase C (PLC) isozymes with emphasis on their regulation by phosphorylation. PLC-beta isozymes are multiply phosphorylated at Ser/Thr residues in response to various extracellular stimuli, but the significance of phosphorylation is poorly understood. Possible approaches include identification of the phosphorylation sites in the four PLC-beta isozymes by peptide sequencing or mass spectrometry, mutation of the identified sites, and expression of the mutant PLC-beta enzymes in a cell line lacking the particular isoform. Cell lines would have to be established from PLC-beta null mice, which are currently available in a collaborator's laboratory. Experience in signal transduction, molecular biology, and protein chemistry would be very helpful.

Scientists of all nationalities are encouraged to apply. During Postdoctoral Training, those with U.S. citizenship or permanent residency might be qualified for other NHLBI programs. Interested candidates should send their curriculum vitae and bibliography and the names of three references to: **Dr. Sue Goo Rhee, Laboratory of Cell Signaling, NHLBI, NIH, Building 3, Room 120, Bethesda, MD 20892.** E-mail: sgrhee@nih.gov; FAX: 301-480-0357. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two positions are available for Fellows to join an established research program that focuses on the site and mechanism of action of biological toxins that act on the nervous system, such as botulinum toxin and tetanus toxin. Potential areas for research include (a) molecular biology studies, such as expression of toxin mutants to help analyze structure-function relationships; (b) cell biology studies to characterize mechanisms for toxin binding to receptors; (c) anatomical studies to visualize and characterize mechanisms for toxin entry into cells; and (d) immunology research to develop vaccines against biological toxins. Applicants should send curriculum vitae to: **Dr. Lance Simpson, Professor of Medicine and Chief of the Division, Room 314-JAH, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107.** Thomas Jefferson University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS funded by NIH are available to study molecular mechanisms of cardiac development and regional variations in cardiac cell properties combined with cellular electrophysiology. Experience in biochemical and molecular biology techniques such as immunoprecipitation, cloning, expression, and phosphorylation assays, etc., is required. Send curriculum vitae, summary of research experience, and three references to: **Dr. Ronald W. Joyner, Department of Pediatrics, Emory University, 2040 Ridgewood Drive N.E., Atlanta, GA 30322.** E-mail: rjoyner@cellbio.emory.edu. An Equal Opportunity Employer.

Position available for **POSTDOCTORAL RESEARCHER** in human metabolism/nutrition. Ph.D. or M.D. with an interest in the area of either lipoprotein metabolism, free radical biology, or vascular biology. The applicant should have a sound background in nutrition/biochemistry. Exposure to lipoprotein research, cell and molecular biology desirable. Interested applicants should write to: **I. Jialal, M.D., University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, CS3.114, Dallas, TX 75235-9073.**

Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study phosphorylation of PKC substrates in cytoskeletal remodeling and mammary tumor metastases in cultured cells, animal models, and human tissue samples. Interested persons should forward their curriculum vitae and names of three references to: **Dr. Susan Jaken, Vermont Cancer Center and Department of Pathology, University of Vermont, A267 Medical Alumni Building, Burlington, VT 05405.** Affirmative Action/Equal Opportunity Employer.

Hoechst Marion Roussel

HMR is a global healthcare company whose pharmaceutical research is focused on the delivery of the most effective medicines to treat the unmet medical needs of the next millennium.

HMR Anti-infectives research is based in Romainville, near Paris, France, in new purpose built laboratories. The Anti-infectives Department is a dynamic international team dedicated to the discovery of novel antibacterials and antifungals that are effective against pathogens resistant to clinical agents.

Our Anti-infectives research is driven from a genomics platform. A key element of this research is Biochemistry Group which leads the design of new High throughput screens and the profiling of compounds found by screening and rational drug design. The Biochemistry Group also leads post genomic studies to elucidate the function of new proteins through proteomics approaches.

To meet the rapidly changing needs of our Genomics driven anti-infectives research, we constantly seek to improve our skills base. In this context we offer the following opportunities in the Anti-infectives Biochemistry Group.

One Senior Scientist/ Biochemist

The ideal candidate will have be educated to Ph.D level with a minimum 5 years of experience in industry.

The successful candidate will :

- Manage a team of scientists and technicians.
- Lead multidisciplinary projects.
- Provide leadership to the discovery of new antifungal and antibacterial targets through biochemical approaches.
- Build strong academic links in functional genomics.

Demonstrable excellence in anti-infective research and/or microbial metabolism is essential.

A keen interest in enzyme catalytic mechanisms would be an advantage.

The ability to communicate in French and English is desirable (training will be given).

Réf. 34

Two Junior Scientists/ Biochemists

The ideal candidates will have a PhD, or equivalent, and demonstrable experience in enzyme kinetics and protein biochemistry.

The successful candidates will :

- Participate in the purification of proteins, establish their biochemical properties and design new assays.
- Characterize enzyme inhibitors.
- Be goal oriented, capable of planning and executing laboratory work to achieve specific milestones within a project team environment.

Familiarity with chemical mechanisms and 3-D structure of enzymes would be a distinct advantage.

Fluency in French and English preferred (training will be provided).

Réf. 37

If you are interested, please forward your resume and list of publications to :

HOECHST MARION ROUSSEL
Marie-Christine LACHAIZE
102 Route de Noisy
93235 ROMAINVILLE CEDEX
FRANCE.

Hoechst

Hoechst Marion Roussel
La société Pharmaceutique de Hoechst



THE UNIVERSITY
OF MANCHESTER

SCHOOL OF
BIOLOGICAL SCIENCES



THE UNIVERSITY
OF MANCHESTER

ACADEMIC POSTS IN BIOLOGICAL AND BASIC MEDICAL SCIENCES

As part of a continuing recruitment programme (26 new academic staff in the last 3 years, of whom more than half joined us from outside the UK) we intend to make further new appointments over the next 12 months.

These 'tenure-track' positions (which may be filled at Lecturer, Senior Lecturer or Chair level) are open to candidates active in any areas of the biosciences which complement our existing research and teaching programmes, but for this round we are particularly interested in those working in the fields of:

- Anatomy
- Biomedical Sciences
- Cell Biology
- Developmental Biology
- Genetics
- Microbial Pathogenicity
- Neuroscience
- Pharmacology
- Physiology

The School delivers teaching to medical, dental and science students, so applications from candidates able to contribute to research and teaching in basic biomedical sciences will be particularly welcome.

Successful applicants will join one of the largest single University Biological Sciences Departments in Europe. There is a strong culture of collaboration and interdisciplinary interactions at all levels of research and teaching across a broad spectrum of Biological and Biomedical Sciences.

Extensive information on the School of Biological Sciences and details of how to apply can be found on

<http://www.biomed.man.ac.uk>

Informal email enquiries from prospective applicants may be made to Professor Mike Grant (Chairman of the recruitment campaign) at biosearch@man.ac.uk

Please indicate field(s) of interest.

A full information pack is available from the Dean's Secretary, School of Biological Sciences, G30A, Stopford Building, The University of Manchester, Oxford Road, Manchester M13 9PT, UK. Tel: +44 (0)161 275 5632; Fax: +44 (0)161 275 5586; E-mail: phough@man.ac.uk

Although this is an ongoing recruitment campaign the closing date for this round is 15 September 1999. Please quote ref: 511/99.



INVESTOR IN PEOPLE

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



POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY

American Society for Microbiology/
National Center for Infectious Diseases

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epidemiology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 1999.
Website: <http://www.asmus.org/edusrc/edu23e.htm>; e-mail: fellowships-careersinformation@asmus.org.

POSTDOCTORAL TRAINING NEUROTROPHIN BIOLOGY

Our laboratory studies trophic and synaptic roles of neurotrophins during development, using *in vitro* models and mouse mutants. We seek a highly qualified individual with a background in neuroscience or developmental neurobiology and specific experience in at least one of the following areas: (1) cellular electrophysiology, (2) cardiovascular or respiratory neurobiology, or (3) *in situ* hybridization. Please send résumé, reprints, and names of three references to: Dr. David M. Katz, Department of Neurosciences, Case Western Reserve University School of Medicine, 10900 Euclid Avenue, Cleveland, OH 44106. Affirmative Action/Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS are available immediately in University of Vermont to investigate (1) insulin-induced proteasome degradation pathway; (2) insulin- and IL-4-mediated the activation of transcription factor. Candidates should have a Ph.D. degree with training in signal transduction, ubiquitin-proteasome degradation, or protein-DNA interaction. Qualified candidate should send, FAX, or e-mail curriculum vitae and names and telephone numbers of three references to: Dr. Xiao Jian Sun, Given C-350, University of Vermont Medical College of Medicine, Burlington, VT 05405. FAX: 802-656-8031; e-mail: xsun@zoo.uvm.edu.

POSTDOCTORAL POSITION IN GENE THERAPY

A Postdoctoral position is available to develop and evaluate ribozyme-based gene therapy in animal models of retinal diseases. Applicants are invited from individuals holding Ph.D. degree and having prior experience in molecular biology/gene therapy. Salaries depend on experience. Forward résumé and three references to: Dr. M. Naash, Department of Ophthalmology, University of Illinois at Chicago, 1905 West Taylor Street, M/C 648, Chicago, IL 60612. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION immediately available to study the cell cycle G1 exit in cancer cells. Applicant must have a Ph.D. and/or M.D. degree. Experience with molecular and biochemical methodology is essential. Send curriculum vitae and three references to: Dr. Lingtao Wu, Department of Pathology, Childrens Hospital of Los Angeles/University of Southern California Medical School, 4650 Sunset Boulevard, MS# 103, Los Angeles, CA 90027. FAX: 323-666-0489; e-mail: lingtaow@hsc.usc.edu.

POSTDOCTORAL POSITION to investigate signaling pathways in the control of cellular function by insulin. We use biochemical, molecular, and genetic approaches to study glycogen synthesis and mRNA translation. Send curriculum vitae to: Dr. John C. Lawrence, Jr., Department of Pharmacology, Box 448, Health Science Center, University of Virginia, Charlottesville, VA 22908. FAX: 804-982-3575; e-mail: jcl3p@virginia.edu.

UVA is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

The National Institutes of Health has both! For more information, visit our website which lists an array of clinical and postdoctoral opportunities, including tenure-track positions.

<http://www.training.nih.gov>

The NIH is an Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS are immediately available to investigate the mechanisms of translesion replication and mutagenesis in yeast and humans, particularly the roles of DNA polymerase ζ and Rev1p in this process (see: Nelson et al., *Science* 272:1646, 1996; Nelson et al., *Nature* 382:729, 1996; Gibbs et al., *Proc. Natl. Acad. Sci. USA* 95:6876, 1998). For one position, preference will be given to a candidate with experience in enzymology and for the other, a candidate with experience in molecular genetics. Send curriculum vitae and three references to: Dr. Christopher Lawrence, Department of Biochemistry and Biophysics, University of Rochester Medical Center, Rochester, NY 14642 USA. Telephone: 716-275-2948; FAX: 716-275-6007; e-mail: christopher_lawrence@urmc.rochester.edu. An Equal Opportunity Employer.

POSTDOCTORAL POSITION

To study cellular activation by endotoxin through receptors of the innate immune system. Excellent skills in molecular biology and protein chemistry are required. Projects may include studies relating to the role of TLR4 and experiments to prepare CD14 suitable for three-dimensional structural analysis. See: *Annu. Rev. Immunol.* 13:437; *Science* 282:2085; *Science* 284:1313.

Reply to: Peter S. Tobias, Ph.D., Department of Immunology, IMM-12, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037. E-mail: tobias@scripps.edu.

TSRI is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW. University of Pennsylvania. A Postdoctoral position is available for studies on male germ cell genetic modification. Projects involve culture and expansion of male germ line stem cells (spermatogonia), followed by transfection and introduction of the transformed cells into the testis. (*Sem. Cell Dev. Biol.* 9:401-409, 1998; *PNAS* 96:5504-5509, 1999). A background in molecular biology and cell biology is preferred. Send curriculum vitae, names of three references, and a letter describing research skills and interests to: Dr. R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, 3850 Baltimore Avenue, Philadelphia, PA 19104.

POSTDOCTORAL POSITION available to study the functions of two RNA-binding proteins, the Ro and La proteins, that are major autoantigens in patients with rheumatic diseases. Our work on the La protein is performed in yeast, while studies on the Ro protein utilize mouse cells and knockout mice. Candidates should have experience in biochemistry, genetics, or molecular biology. Please send curriculum vitae, a summary of research experience, and the names of three references to: Dr. Sandra L. Wolin, Department of Cell Biology, Yale University School of Medicine, 295 Congress Avenue, New Haven, CT 06536.

POSTDOCTORAL POSITION is available immediately to characterize yeast genes and their encoded proteins involved in DNA repair/oxidative damage to cells. Experience in yeast genetics, molecular biology, and protein biochemistry is preferred but not required. Send curriculum vitae and references to: Dr. Carol Wood Moore, Department of Microbiology, CUNY Medical School/SBE, Convent Avenue at 138th, J-920, New York, NY 10031.

ANNOUNCEMENTS



2000 SOCIETY FOR INTEGRATIVE AND COMPARATIVE BIOLOGY ANNUAL MEETING

Abstract Deadline: August 13, 1999

Present your research at the 2000 Society for Integrative and Comparative Biology (SICB) Annual Meeting, an educational and research forum for the biological sciences, to be held January 4-8, 2000, in Atlanta. Housing or registration support is available for students and Postdoctorals who are SICB members. For more information or to submit an abstract, visit website: www.sicb.org or Telephone: 312-527-6697.

CALL FOR APPLICATIONS

European Community Large Scale Ultralow Temperature Facility, Universität Bayreuth, Germany. Within the European Community Programme "Training and Mobility of Researchers," the Ultralow Temperature Facility provides support to users from the 15 countries of the European Union and the associated countries Iceland, Israel, Liechtenstein, and Norway for research and training. The facility is devoted to research in condensed matter physics at low and very low temperatures. The facility offers free access (including travel and living expenses) to its cryogenic equipment. For further information contact: Prof. Dr. Georg Eska, Telephone: +49-921-55-3342; FAX: +44-921-55-3647; e-mail: girgl@btp9xa.phy.uni-bayreuth.de; website: <http://lowt.phy.uni-bayreuth.de/lsf/advertis.html>.

EUROPEAN OPPORTUNITIES

POSTDOCTORAL FELLOWSHIP DRUGS IMMOBILIZATION ON BIOACTIVE SUBSTRATES

A two-year Postdoctoral Fellowship, to carry out research on bioactive materials used as support for drugs immobilization and subsequent *in situ* release for the treatment of bone disorders, is available at Institute for Molecular and Cell Biology (IMBC) of the University of Oporto. The project involves a great deal of innovative research on the biology of bone and cartilage. Part of the work is to be carried out in an American University.

Applications can be sent by post, e-mail, or FAX to: Institute for Molecular and Cell Biology, Rua do Campo Alegre 823, 4150-180 Porto, Portugal. E-mail: inebmat@ibmc.up.pt; FAX: 351-2-6099157. A curriculum vitae, list of publications, and two letters of recommendation should be included. Deadline for submission of applications: 30 July 1999.

FELLOWSHIPS

Dystonia FELLOWSHIP. A two-year Fellowship of \$50,000 per year focusing on genetics, treatments, and studies of torsinA biology related to dystonia is available from: The Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601. Telephone: 312-755-0198; FAX: 312-803-0138; e-mail: dystonia@dystonia-foundation.org. Application deadline is December 30, 1999.

GRANTS

Dystonia GRANTS. One-year grants of \$35,000 focusing on genetics, treatments, and studies of torsinA biology related to dystonia are available from: The Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601. Telephone: 312-755-0198; FAX: 312-803-0138; e-mail: dystonia@dystonia-foundation.org. Application deadline is December 30, 1999.

MEETINGS

MOLECULAR LIBRARY TECHNOLOGIES AT THE MILLENNIUM. October 24-26, 1999; Holiday Inn, Chinatown, San Francisco. Organizers: D. Burton, J. Larrick, J. Marks. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043 USA. Telephone: 650-694-1420; FAX: 650-694-7717; e-mail: paimm@netgate.net. Details, website: www.pano.com/paimm.

MARKETPLACE

Science's Literature Library
www.scienceonline.org
Click on E-Marketplace.

**Coated Microwell Plates
Coated Microscope Slides**
XENOPORE Corp.
www.xenopore.com
1-800-356-6296 1-973-423-2400

Circle No. 30 on Readers' Service Card

Molecular Biology Insights **Cligo** Since 1989!
Primer Analysis Software
800 747 4362 www.oligo.net

Circle No. 29 on Readers' Service Card

High Quality Synthetic DNA
DNAgency
• Quick Turn-Around • Good Technical Support • Order by Fax/E-Mail
1 610 993 9464/orders@dnagency.com
Phone numbers: 1800 249 7841 • 1 610 993 9323
\$1 200nm per base desalted full QC gel picture

Circle No. 84 on Readers' Service Card

\$240/30 Tests
STRICTLY FOR NON-HUMAN RESEARCH
ImmunoDiagnostics, Inc.
Rapid HIV-1 Capsid p24 Test
• Sensitive to less than 1 pg/ml
• Tissue Culture/Serum Plasma p24
• Result in Less than 5 Minutes
800-573-1700

Circle No. 81 on Readers' Service Card

Full Spectrum **Gene Services** Remove the limits!
GENE synthesis, cloning, mutagenesis, expression, codon optimization, library, chimera, tailoring, regulation, quantification... & more!!!
de novo gene synthesis at \$10/bp
PLASMID PURIFICATION for Gene Therapy
Ultrapure plasmid at \$50/mg
650-827-1984, CustomerService@ElimBiopharm.com

Circle No. 65 on Readers' Service Card

MARKETPLACE

fri morfo
We keep you in focus™
Rte. du Musée 12, CH-1705 Fribourg, Switzerland
Tel: +41 26 300 85 30 Fax: +41 300 96 68
info@frimorfo.com www.frimorfo.com
Specialist in the morphological study of genetically modified animals

Circle No. 83 on Readers' Service Card

NEW ENGLAND PEPTIDE, INC.
888-343-5974 (phone)
978-343-5940 (fax)
www.newenglandpeptide.com
LOOKING FOR:
• Higher Quality?
• Better Service?
• Easier Pricing?
Find the best custom peptide experience at New England Peptide, Inc.
Custom Peptides...Made Easy

Circle No. 31 on Readers' Service Card

HUMAN CNS CELLS

Neuronal precursor cells
Dopaminergic neuronal cells
Astrocytes, microglial cells
Clonexpress, Inc., 301-869-0840

www.clonexpress.com; info@clonexpress.com

Circle No. 82 on Readers' Service Card

ANTISENSE
• Proprietary NextGeneration™ antisense compounds
• Oligofectin™ cellular delivery compounds
• Detailed protocols and target site selection
Sequitur, Inc.
(508)650-1459 http://www.SequiturInc.com

Circle No. 21 on Readers' Service Card

3 Minutes to Pure PCR Products

Uses a Spin Filter Format • Free Sample
Fast and Easy with Superb Results!

800.606.6246

MO BIO www.mobio.com

Circle No. 7 on Readers' Service Card

PEPTIDE + ANTIBODIES PACKAGE - \$1200
β-AMYLOID(1-40) \$200/mg
ANASPEC
800-452-5530 (phone) service@anaspec.com
408-452-5059 (fax) www.anaspec.com

Circle No. 34 on Readers' Service Card

RNA OLIGOS
Translational Control • Long Oligos •
Enzymology • SRNA, 2'0-Me, Fl, Bio •
RNA Crystallography • Custom Chimeras •
Special Monomers • Fluorescent Labels •
RNA Oligos our Specialty!
Dual-Labeled Fluoro Probes & Great Primer Prices!
CyberSyn
Phone: 800-DNA-FAST, Fax: 800-DNA-EASY
http://members.aol.com/cyberwyn1

Circle No. 23 on Readers' Service Card

MARKETPLACE

Custom DNA Sequencing

♦ Long Reads ♦
♦ Plasmid Inserts ♦
♦ Sequence Done in a Week ♦

♦ 450 bp \$30.00 ♦

♦ 650 bp \$45.00 ♦

♦ 850 bp \$60.00 ♦

(Both Strands are Read)

Inquire about Large Inserts and Genome Sequencing.

MWG-BIOTECH, Inc
Call: 336-812-9962 info@mwgbiochem.com
http://www.mwgbiochem.com

Circle No. 51 on Readers' Service Card

Custom Antibodies & Peptides

No Hidden Charges!

Custom Antibodies from \$1295 including:

- Free consultation and tech support
- HPLC purification, MS & HPLC analysis, N/C-terminal modifications, 4-6mg peptide, 100+ml serum, ELISA & more

Custom peptides from mg to >10g
HPLC purification available up to 98+ %!

800-435-2080
Fax: 508-435-2199
Order on-line:
www.qcb.com



QCB is a division of BioSource International, Inc.

Circle No. 49 on Readers' Service Card

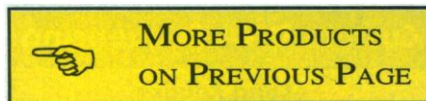
Keystone Labs 90¢/base
Custom Oligos No Set-up Fee!
Order: www.keydna.com
Tel: 800-788-4362 • Fax: 800-786-4362
A BioSource International, Inc. Company

Circle No. 13 on Readers' Service Card

COVANCE THE DEVELOPMENT SERVICES COMPANY
BALCO BERKELEY ANTIBODY COMPANY
Meeting Your Immunology Needs
Superior Epitope Tag Antibodies
• HA.11 • 6-His
• 9E10 (c-myc) • Glu-Glu
• AU1 / AU5 • FLAG®
1223 S. 47th St., Richmond, CA 94804
immunology.products@covance.com
800-922-2226

Circle No. 66 on Readers' Service Card

MARKETPLACE



Custom Polyclonal Antibodies
BEST PRICES • BEST ANIMALS
ANIMAL PHARM SERVICES
(800) 808-0550

Circle No. 1 on Readers' Service Card

routine & unique
ANTIBODIES
Specific markers for a wide range of applications:
• Macrophages • Endothelial Cells
• Histopathology
• Custom Monoclonals and Polyclonals
BMA BIOMEDICALS AG
Call for your free catalogue: ++41 61 811 6222 (phone)
info@bma.ch ++41 61 811 6006 (fax)

Circle No. 19 on Readers' Service Card

Mutagenesis
as low as **\$500**
"DNA...It's in our blood"
1-800-654-4671
http://www.ana-gen.com **ANA-GEN**
Ana-Gen Technologies, Inc.

Circle No. 17 on Readers' Service Card

DNA SYNTHESIS
\$0.80 per base for 5-10 OD
DNA SEQUENCING
As low as \$14 / Run
Retrogen
Sales@Retrogen.com 1-800-RETROGEN

Circle No. 36 on Readers' Service Card

NEW LOW PRICES
VOLUME DNA SEQUENCING
CALL (800) 720-GENE
• HIGH-THROUGHPUT GENOME SEQUENCING
• SHOTGUN SEQUENCING EXPERTISE
• NO ROYALTIES OR LICENSE FEES
• LARGE & SMALL PROJECTS ACCEPTED
seqwright
DNA SEQUENCING • (713) 528-4363 PHONE
(713) 528-6232 FAX
www.seqwright.com
email: seq@blkbox.com

Circle No. 4 on Readers' Service Card

XX-IDT®
INTEGRATED DNA TECHNOLOGIES, INC.
Premier Specialty DNA Synthesis
\$0.60 Base/100 nmole scale
Dual Labeled Probes, RNA & More
1-800-328-2661 - www.idtdna.com

Circle No. 27 on Readers' Service Card

MARKETPLACE

Custom Primers - 48 hr turnaround: \$0.69/base
50µg - Standard Purity - Ready to Use
ransom hill bioscience, inc.
http://www.ransomhill.com
no setup - no minimum - no baloney!
internet: visla@ix.netcom.com fax: (800) 597-8509

Circle No. 14 on Readers' Service Card

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

Circle No. 9 on Readers' Service Card

Quality DNA Synthesis
MALDI-TOF Mass Spectrometry Quality Control
Fluorescent Dyes & Other Modifications
Gene Construction and Sequencing Services
Custom RNA Oligos and Antisense DNA Oligos
Custom Primers for PCR & Sequencing
Long Oligos (up to 150-mers)
Competitive Pricing 800-247-8766
MIDLAND
The Midland Certified Reagent Company
Fax: (915) 694-2387 Email: mcrc@oligos.com
Website: www.mcrc.com

Circle No. 2 on Readers' Service Card

Smart Move!
Customized Project Support
with GLP. You Win!
DNA TECHNOLOGIES
• Molecular Biology Services:
- Large Scale Plasmid Preps (1-500mg, Endotoxin-free)
- Cloning Projects
- Overexpression Projects
- Site-Directed Mutagenesis Projects
- Batch Fermentation Service
- Library Screening
- cDNA & gDNA
Commonwealth Biotechnologies, Inc.
Call Toll Free Fax On Demand 1-877-329-4224
Toll Free 1-800-735-9224
Or visit us at www.cbi-biotech.com

Circle No. 10 on Readers' Service Card

DNA SEQUENCING
All Templates, 1 FREE RUN
EST, low, medium, high throughput
as low as \$12/run
1-800-4-PLASMID • www.bio101.com

Circle No. 28 on Readers' Service Card

MARKETPLACE

BIO•SYNTHESIS, INC.
POLYCLONAL ANTIBODY PRODUCTION
Economy Class: **\$1,450.00/project**
~ Synthesis of peptides at >70% purity
~ Conjugation of peptide to KLH
~ ELISA Testing
~ Immunization of 2 rabbits
1-800-DNA-EXAM Fax: (972) 420-0442 biosyn@biosyn.com

Circle No. 15 on Readers' Service Card

Quality Peptides and Antisera
Friendly, Personal Service
www.genosys.com
Custom Peptide Synthesis
• sequence analysis
• lg, >70%, >80%, >95% purity
• scales from 2 mg-1g
• variety of modifications available
• mass spec & HPLC on every peptide
• satisfaction guaranteed
Polyclonal Antisera Service
• antigen design assistance
• synthesis, conjugation and sera collection
• flexible protocol
GENOSYS
North America 1-877-710-1502 Europe (+44) (0) 1223 839000
email: info@genosys.com email: genosys@genosys.co.uk

Circle No. 50 on Readers' Service Card

DNA	PEPTIDES
Call for prices	\$15.00/residue
Gene Synthesis, Site Mutagenesis, Protein Expression as low as \$500	
Sequencing: \$25 per run	
Custom Anti-peptide Antibody (including peptide synthesis) \$850	
GENEMED SYNTHESIS 800.344.5337 Fax: 650.952.9540 http://www.genemedsyn.com	

Circle No. 11 on Readers' Service Card

Custom Peptides
\$14/residue
3 days turn around
Free Mass Spec
HPLC/UV Trace
8-17 residues
20-50 mg (Desalted)
Please inquire for modified peptides
Tel: 800-597-7873
925-371-1070
Fax: 925-371-1156
email: peptide@peptidogenic.com
PeptidoGenic The Peptide Engineering Specialist

Circle No. 40 on Readers' Service Card

Express Peptides
20mg in 5 days
\$14 per residue
Research Genetics
1-800-533-4363

Circle No. 3 on Readers' Service Card

Need Plenty of Oligonucleotides?



Operon has *Beefed Up* its capacity!

Do you have a project that requires a large number of oligonucleotides? Operon Technologies has expanded its DNA synthesis capacity. We can handle orders for many thousands of oligos and deliver them quickly, usually in less than one week. We can ship large orders in individual tubes or in 96-well formats. And with large orders, we apply volume discounts to our already low list prices. For a price quotation or other information, please call our customer service department at 800-688-2248 or send an e-mail to dna@operon.com.

List Prices for Custom DNA Services (discounts available for high volume orders)

Custom DNA Synthesis Prices			Purification Options		Sequence Modifications	
Scale	Price/base	Set-up	Method	Price	Modification	Price
0.05 μ mole	\$0.60	\$5.00	Sephadex	free	Amino Modifier	\$25
0.2 μ mole	\$1.20	\$10.00	HPLC	from \$30	Biotin	\$50
1.0 μ mole	\$2.40	\$20.00	PAGE	from \$45	Fluorescein	\$50
(Larger scales available)			(Many scales available)		(Many other modifications)	



World's Leading Supplier of Synthetic DNA

1000 Atlantic Avenue, Suite 108 • Alameda, CA 94501
Phone: 800-688-2248 • Fax: 510-865-5255 • E-mail: dna@operon.com • Web: <http://www.operon.com>

Circle No. 44 on Readers' Service Card

Custom Peptide Synthesis

\$14.00/residue!

Our popular custom peptide synthesis service is only \$14.00 per residue for peptides 10-20 residues in length. This service guarantees a minimum of 20mg of product and, as always, the mass spectrometry is included free of charge. Peptides will be shipped 5 days after the order is placed.

For researchers needing longer peptides or more product, we also offer a bulk synthesis service for \$39.00 per residue. Please call our custom peptide synthesis department, or send e-mail to kwasmund@resgen.com, for additional details on either of these services.

Research Genetics

Accelerating Discovery

2130 Memorial Pkwy, SW • Huntsville, AL • 35801

U.S. or Canada 800-533-4363

Worldwide 256-533-4363

U.K. 0-800-89-1393

FAX 256-536-9016

<http://www.resgen.com>

Circle No. 39 on Readers' Service Card