

NEW PRODUCTS

SLIDE BARRIER MARKING PEN

The PAP Pen is a special marking pen designed for drawing thin film-like barriers on slides. This barrier creates the proper surface tension needed to hold antibody solution and other specimens within a target area. The PAP Pen releases fluids in precise amounts and dries quickly. It is effective for immunoperoxidase staining, frozen section, and fluorescent antibody staining methods. The pen contains a special water-repellent formulation that is insoluble in alcohol and acetone.

Research Products International

For more information call 800-323-9814 or **circle 144** on the Reader Service Card

POLAROID DIGITAL CAMERA

The DMC 1e Polaroid Digital Camera offers high resolution images with speed and ease. The camera gives fast image capture, detailed resolution, and the ability to save files in multiple formats. The unit can capture full color images at a rate up to 11 frames per second. A preview mode gives accurate color images with sharp edges and crisp shadow detail on the user's computer screen, allowing for easier framing and focusing of the sample before the image is taken. The camera provides up to 1600 by 1200 full color lines of resolution from any standard-size microscope and is compatible with both Windows and Macintosh operating systems.

Electron Microscopy Sciences

For more information call 215-646-1566 or **circle 145** on the Reader Service Card

PRIME RNASE INHIBITOR

Prime RNase Inhibitor is a protein of non-human origin that binds noncovalently and inhibits the same types of ribonuclease as human placental ribonuclease inhibitor, including ribonuclease A, B, and C.

Eppendorf Scientific

For more information call 516-334-7500 or **circle 146** on the Reader Service Card

The reagent can be used in reverse-transcriptase polymerase chain reaction; cDNA synthesis; in vitro transcription using the SP6, T7, and HeLa cell extract systems; and in vitro translation using rabbit reticulocyte lysates or wheat germ extracts. It inhibits more than 90% of ribonuclease activity, compared with only 50% inhibition by human placental ribonuclease in-

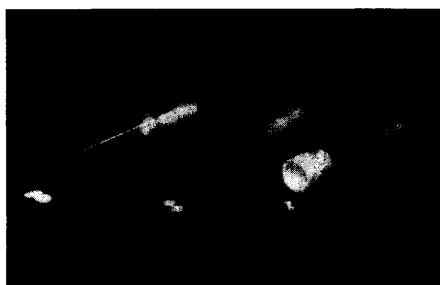
hibitors. It is stable under a broad range of conditions and does not interfere with ribonucleases T1, T2, H, U1, U2, or CL3.

STERILE CLONING DISKS

Scienceware Sterile Cloning Discs transfer cells quickly and easily to 24-well plates for growth. They virtually eliminate the leak problems associated with other cloning cylinders, and reduce the risk of contamination and drying because the cells are exposed for a much shorter time than

Bel-Art Products

For more information call 800-4BEL-ART or **circle 147** on the Reader Service Card



with cloning cylinders. The disks are RNase and DNase free and are available in three sizes, from 1/8- to 1/4-inch diameter.

DATA ANALYSIS SOFTWARE

Analyze/ISE is Windows software that interfaces with most pH, dissolved oxygen, and ion-selective electrode meters to collect and analyze data. Any data produced by simple meters can be processed using standard curves, concentration checks, slope monitoring, quality control charting, two-point standard addition,

Labtronics

For more information call 519-767-1061 or **circle 148** on the Reader Service Card

and more. It is compatible with most brands of meters and operates in a manual mode as well as an automatic mode, using a sampler and pump to transfer samples.

BIO ASSAY READER

The HTS (high-throughput screening) 7000 Plus Bio Assay Reader is for rapid turnaround of non-radioactive, photometric analyses on large arrays of small volume samples in microplates containing six to 1536

Perkin-Elmer

For more information call 800-762-4000 or **circle 149** on the Reader Service Card

wells. Applications include DNA and protein quantitation, drug screening and therapeutic monitoring, immunoassays, and cell function studies including toxicity, viability, apoptosis, proliferation, and adhesion. The system includes powerful software for tracking thousands of samples per day. Users with few samples can benefit from multichannel pipetting in strip wells and perform traditional cuvette-based analyses rapidly. Multiple tests per plate can be evaluated automatically, and a variety of curve-fitting options can produce tabular and graphical reports of quantitative or qualitative results.

LITERATURE

Gateway Cloning Technology: The Fastest Route to the Future is a brochure on a novel universal cloning technology. Based on the well-characterized phage lambda site-specific recombination system, the patented technology provides an efficient alternative to the two current conventional cloning and expression methods—restriction enzyme digestion and the cloning of polymerase chain reaction (PCR) products.

Life Technologies

For more information call 301-610-8000 or **circle 150** on the Reader Service Card

The new system replaces restriction enzyme digestion, ligation, gel electrophoresis and analysis, and additional PCR amplification with the fidelity of site-specific recombination. The technology allows the parallel transfer of any number of genes into or out of multiple expression systems by simply mixing DNAs, adding proteins, and incubating. Because DNA segments transferred using this technology maintain reading frame and orientation, the technology is applicable to optimization of protein expression with or without fusion tags, as well as facilitating functional analysis of genes. The system can also be used for the directional cloning of PCR products, with the resulting clones generated in a transfer-ready format.

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.

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
Tel: 202-326-6541
Fax: 202-289-6742
E-mail: science_displayads@aaaas.org

Line Classified Advertising

Christina Geiger Kathleen Clark
Tel: 202-326-6532 Tel: 202-326-6722
Fax: 202-289-6742
E-mail: science_classifieds@aaaas.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: science_internet@aaaas.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

NOVO NORDISK FOUNDATION RESEARCH CONSORTIUM

on

Vascular Biology in Diabetic Microangiopathy

Postdoctoral Positions

The Consortium is a research effort funded for a period of 10 years, 1999-2008. The Consortium consists of seven interactive research groups in Sweden and Finland, with a total research personnel of about 140 persons. The overall goals of the project are to explore the basic biology of small blood vessels and to provide understanding of the pathogenesis of microangiopathy a major complication of diabetes leading to nephropathy and renal failure, retinopathy and blindness as well as neuropathy and skin ulcers.

We are interested in recruiting outstanding postdoctoral level investigators to the participating groups. The projects, their group leaders, and contact addresses are:

Vascular endothelial growth factors, receptors and signals involved in angiogenesis and lymphangiogenesis. Professor Kari Alitalo, University of Helsinki, Haartman Institute, P.O. Box 21, 00014 Helsinki, Finland, phone: +358-9-1912 64 34, fax: +358-9-1912 64 48, email: kari.alitalo@helsinki.fi

Endothelium-pericyte interactions in blood vessel development and diabetic microangiopathy. Professor Christer Betsholtz, Department of Medical Biochemistry, University of Gothenburg, Box 440, 450 30 Gothenburg, Sweden, phone: +46-31-773 34 60, fax: +46-31-41 61 08, email: christer.betsholtz@medmod.medkem.gu.se

Intracellular signalling and the pathogenesis of microangiopathy in diabetes. Professor Per-Olof Berggren, Department of Molecular Medicine L1:02, Karolinska Institutet, 171 76 Stockholm, Sweden, phone: +46-8-517 757 31, fax: +46-8-30 34 58, email: per-olof.berggren@molmed.ki.se

The impact of genetics and hyperglycaemia on development of vascular diabetic complications. Professor Suad Efendic, Department of Molecular Medicine, Karolinska Institutet, 171 76 Stockholm, Sweden, phone: +46-8-517 743 65, fax: +46-8-517 730 96, email: suad.efendic@molmed.ki.se

Functional analyses of VEGFs and related growth factors in health and disease. Associate Professor Ulf Eriksson, Ludwig Institute of Cancer Research, Karolinska Institutet, 171 77 Stockholm, Sweden, phone: +46-8-728 71 09, fax: +46-8-33 28 12, email: ueri@operon.licr.ki.se

Molecular mechanisms in regulation of endothelial cell function by growth factors and by endogenous anti-angiogenic molecules. Professor Lena Claesson-Welsh, Department of Genetics and Pathology, Rudbeck Laboratory, S-751 85 Uppsala, Sweden, phone: +46-18-471 43 63, fax: +46-18-55 89 31, email: Lena.Welsh@genpat.uu.se

Molecular biology and genetics of vascular basement membranes and the kidney filter in diabetes complications. Professor Karl Tryggvason, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, 171 77 Stockholm, Sweden, phone: +46-8-728 77 20, fax: +46-8-31 61 65, email: karl.tryggvason@mbb.ki.se

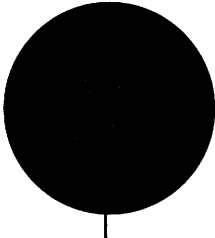
Applicants should submit a C.V. and two references to respective group leaders.

EUROPEAN COUNTRIES REPORT: SWEDEN AND DENMARK

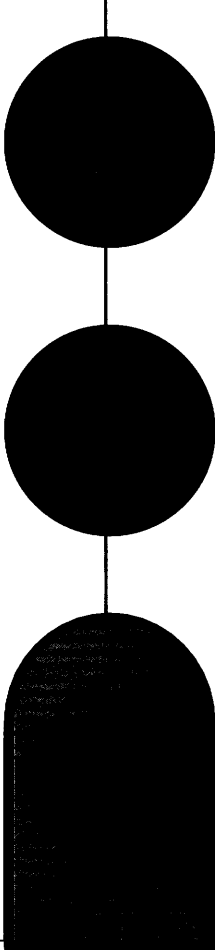
Two Countries,

by Peter Gwynne

One System



The Medicon Valley, which spans Øresund, the sound between Denmark and Sweden, has a high density of biomedical companies, universities, and hospitals; a dense net of R&D collaborations; and significant job opportunities for life scientists. Its growth will accelerate in summer when a bridge opens across the sound.



The Medicon Valley is southern Scandinavia's answer to the American biomedical clusters in the Bay area and Boston. Spanning the Øresund sound, the eight-mile stretch of water that separates Denmark's main island of Sjælland from southern Sweden, the Valley has become a haven of academic and corporate institutions that specialize in life science. Large global pharmaceutical companies, biotechnology start-ups, academic life science departments, and hospitals are scattered throughout the region. Many participate in collaborative ventures. Several analysts see the Medicon Valley becoming one of the three largest regions in Europe for biomedicine and biotechnology, behind only Munich and London.

Not only does the Valley include more than 60 percent of Scandinavia's pharmaceutical and biotechnology firms; it boasts one of the highest concentrations of biotechnology firms anywhere in the world. The arrival of 10 new biotech firms in the region last year brought the total to at least 100 biotechnology start-ups. In all, the Valley's biomedical industry employs 30,000 people, including at least 4,000 researchers with degrees in life science. And with an annual growth rate of 10 percent, the region has an increasing demand for qualified life scientists.

Those demands will soon accelerate. This summer, a new bridge across the Øresund, officially called the Øresund Fixed Link roadway system, will open to automobile and rail traffic. At present, people can travel across the sound only by Hovercraft, a journey that can take close to an hour. The toll bridge will shorten the trip between

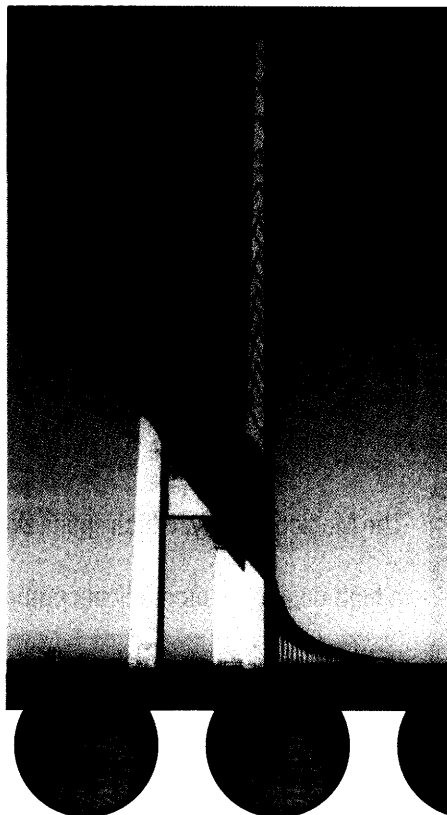
Copenhagen and Malmö to about half that. Water will no longer be a barrier between the two nations that form the Medicon Valley. The growth of the Valley, in both numbers of companies and geography, will undoubtedly accelerate.

Even before the bridge is completed, the Valley is expanding. As originally conceived, it covered only the areas along the Øresund from greater Copenhagen to Skåne, Sweden's southernmost region. Now, the Valley is stretching up the two nations' coastlines, as far as Aarhus, Denmark, and Göteborg, Sweden. New science parks will attract fresh start-up companies, which in turn will feed collaborative efforts with universities, hospitals, and large companies in the Valley.

• • • **SOURCES OF FINANCE** New financing will also encourage growth of the Valley. To date, the region has relied on funding from the governments of Denmark and Sweden, the European Union, pension funds, BI Technology A/S, and individual companies. Last month, investors from Denmark and Sweden announced the formation of the area's first venture capital company. Called Medicon Valley Capital, it starts with \$48 million in funds. "The region's highly educated population and excellent research environment translate into optimal conditions for innovative projects and firms," declared Håkan Åström, chairman of the new company's board and investment committee. "There is, however, a definite and as yet unsatisfied need for a venture company focused on the biomedical business to provide capital and to function as a sparring partner in both a purely technical sense and a management one. We want to fulfill that need."

The opening of the bridge will stimulate exchange between the two countries. Southern Sweden has a lower cost of living, while jobs pay better in Denmark. So observers expect an increase in the number of commuters living in Sweden and working in Denmark as a result of the convenient commuting enabled by the bridge. More companies are likely to locate on the Swedish side of the Valley because the bridge will put it within easy reach of Copenhagen's cosmopolitan social life. Until now, firms in southern Sweden have had some difficulty attracting young employees because the region has no large cities as centers for social lives.

Bridge building of a figurative variety has become a key theme of the Valley. In 1997, universities, hospitals, and pharmaceutical companies on both sides of the sound set up the Medicon Valley Academy. This has evolved into a dynamic network that brings together three types of institutions and two regions that have traditionally had little contact with each other. It aims to build a database of research and researchers throughout the Valley, to set up initiatives that will give companies access to highly skilled staff, and to help local institutions establish best working practices. It also helps to organize collaborative projects among different companies and between companies, university departments, and hospitals, as well as the rapidly growing family of innovation activities.



• • • • •
The Øresund

Fixed Link roadway
system will open
to automobile and
rail traffic in
the summer.

• • • • •

Academic institutions have recently started up a collaborative venture of their own. The Øresund University involves 11 universities with about 120,000 students. It aims to coordinate research and teaching in life science. In addition, academic institutions at the Danish and Swedish sides of the Valley are setting up new research institutions. The University of Copenhagen is starting a Center for Biotechnology Research and Innovation, while the University of Lund has opened a biomedical center.

As it grows, the Valley is attracting more scientists from beyond Denmark and Sweden. As a result, the region is becoming more international in ambience. Many institutions now use English as the language of the lab and the board room. Insiders advise foreign scientists not to be cowed by the prospect of working in Scandinavia, although they suggest that an effort to learn Danish or Swedish will help newcomers to settle into the local culture.

What does this mean in terms of employment? Institutions in the Medicon Valley want to hire life scientists qualified in several disciplines. Here, we discuss research, collaborative projects, and job prospects with representatives of four pharmaceutical companies and one university in the Medicon Valley.

• • • **BAGSVÆRD, Denmark:** "It's my belief that Novo Nordisk and the Medicon Valley will benefit from an even better technology, training, and recruitment base as better scientists are attracted to the region," says Børge Diderichsen, director of research for pharmaceutical company Novo Nordisk A/S. "We also hope that when scientists, companies, and investors from abroad discover our advanced infrastructure

CONTINUED ➤

Head of Department

Risø National Laboratory invites applications for the position as Head of Department in the Optics and Fluid Dynamics Department.

The Optics and Fluid Dynamics Department

The department is one of seven research departments at Risø National Laboratory. The number of employees in the department is 63 with a scientific staff of 40. Moreover, the department hosts a considerable number of visiting scientists.

- The department develops systems, structures and materials for optical measurements, diagnostics and information processing based on diffractive optics and non-linear dynamics.
- Together with national and international industrial companies the department participates in several EU-supported research projects, including the European research programme on fusion energy.
- The department has a substantial number of contracts with Danish industry.

Work at Risø is organised in programmes and projects with a growing share of external funding. The Head of Department reports to the Managing Director and has a wide degree of freedom to act towards agreed scientific and economic targets.

Qualifications

- An internationally recognised scientific background in one of the research areas of the department.
- Scientific and managerial impact.
- Excellent interpersonal skills.
- Ability to initiate and manage externally funded research.
- Documented experience from co-operation with industry will be an advantage.

Terms of employment

The terms of employment will be in accordance with those of the Danish scientific staff at Risø National Laboratory. The salary will be commensurate with qualifications and experience combined with an annual performance contract.

A selection committee with external participation will evaluate the qualifications of the candidates.

Information

Further information can be obtained from Managing Director Jørgen Kjems (phone +45 4677 4600; e-mail joergen.kjems@risoe.dk) or from Vice-Director Jørgen Honoré (phone +45 4677 4602; e-mail joergen.honore@risoe.dk).

Information about Risø National Laboratory and the Department of Optics and Fluid Dynamics can be found at the website www.risoe.dk.

Application

The application, marked "Head of Department 10/00", including CV and other relevant material, should be sent to:

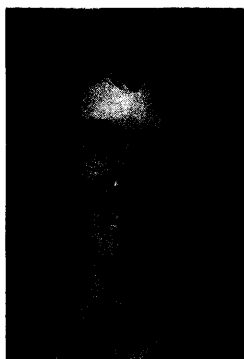
Risø National Laboratory
Personnel Office, Building 101
Postbox 49
DK-4000 Roskilde
Denmark

The application should be sent in five copies. Deadline for submission of applications is 20th March 2000.

The logo for Risø National Laboratory, featuring the word "RISØ" in a stylized, white, serif font on a black rectangular background.

Risø National Laboratory is the largest research institution in Denmark with about 950 employees. The main research areas are energy, environment and materials.

www.risoe.dk



Børge Diderichsen ■ Novo Nordisk A/S

and the qualities of life in the region, we will be able to import new bright people and innovative ideas. The more international the ambience of the Valley becomes, the more likely it will become that we can attract more overseas scientists."

Novo Nordisk already employs several scientists from beyond Scandinavia. "In many departments, there are people who don't speak Scandinavian," Diderichsen says. "So every-

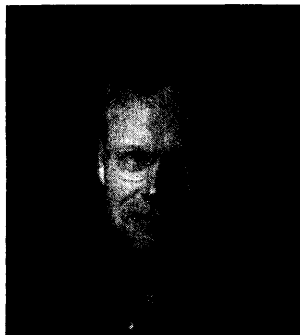
body speaks English." The major cultural difficulty affects spouses of incoming scientists. However, says Diderichsen, "we have many examples of people doing quite well in terms of adapting to the culture."

In terms of jobs, the company is growing and hiring at a steady rate of about 5 percent annually. "We like scientists with broad experience, and especially extensive hands-on experience in many technologies and disciplines," says Diderichsen. "That means that we almost always employ scientists with one or two years of postdoc experience in an excellent laboratory abroad." The company has particular interest in one skill. "A very critical talent is the ability to handle large amounts of data," says Diderichsen. "We want to hire individuals skilled in bioinformatics, high-throughput screening, and chemical libraries and able to handle all the data produced by tremendously efficient screening systems. Also important is a really deep understanding of biology, preferably with a medical slant."

• • • **VALBY, DENMARK:** H. Lundbeck A/S, a pharmaceutical company that concentrates on diseases of the central nervous system, has a variety of collaborative projects with institutions in the Medicon Valley. A unique venture with Novo Nordisk involves a joint library of chemical compounds and gives Lundbeck access to high-throughput screening technology. Others are designed to make available specialist technology developed by small biotechnology firms in the Valley. Lundbeck sets out to establish collaborations at a very early stage by acting as an adviser to start-up biotechnology companies in the Valley.

The region "has also given us much better access to skilled labor among people who have been educated in several companies in the Medicon Valley," says Claus Bræstrup, Lundbeck's executive vice president, research and development. The bridge over the Øresund will expand the company's options by making available new technology and new employees. "We will immediately get access to twice as much education as we have today," says Bræstrup. "In the past, we have had very good Swedish applicants for jobs who didn't want to commute. Now, people can live in Lund and commute easily to Copenhagen."

Lundbeck certainly needs new job applicants. "In 1999, we increased our science staff from 160 to more than 200," says Bræstrup.



Claus Bræstrup ■ H. Lundbeck A/S



"Medicinal chemistry is growing very rapidly. Molecular biology in the neurosciences is growing. And neuropharmacology is very important." The company expects to hire at the Ph.D. level. "We look for team capability, flexibility, and ambition," Bræstrup says.

The company recruits life scientists throughout Europe. "We used to be very focused on the United Kingdom, but that's changing now," says Bræstrup. "A number of highly qualified German scientists are applying. We also have a lot of Dutch scientists."

Trevor Hallam ■ AstraZeneca ➤

• • • **LUND, SWEDEN:** Created six months ago out of Astra Draco and Zeneca Pharmaceuticals, AstraZeneca is the major pharmaceutical company on the Swedish side of the Medicon Valley. The company's discovery operation, on Astra Draco's old site in Lund, concentrates on asthma, COPD, and other respiratory diseases. "There's a good reason why we decided to remain in Lund," says Trevor Hallam, head of discovery at the site. "We are here because of the strength of our scientific base, and we recognize that the local universities and university hospitals are as good as any in the world."

As a quid pro quo, AstraZeneca has the size — more than 1,000 employees — to influence the entire region. "I think the biggest impact we have here is in bringing an international perspective to the Medicon Valley," says Hallam. "We have a lot of collaborations with local universities. Now we want to make sure that we complement these interactions with our international interests."

Strictly in terms of jobs, the company relies on global recruiting almost as much as that in the Valley. However, it has used its membership on the Medicon Valley board to good advantage for itself and other Valley institutions. "We briefed the board about strategic directions for AstraZeneca R&D in Lund, telling them of our aim to build a worldwide center of excellence for respiratory diseases," explains Hallam. "We are pleased that professors of medicine at Lund University have shown interest in aligning their competence to complement AstraZeneca's commitments. We hope that the Department of Medicine will become a magnet for students in this field."

Hallam expects the bridge over the Øresund to improve prospects for recruiting scientists from abroad. The presence of a large cosmopolitan city is important for many individuals, he explains. Malmö, the largest city in southern Sweden, is too small to take on that role. "But Copenhagen is an attractive, large international city," he adds. By bringing southern Sweden closer to Copenhagen, the bridge "will help me to pull in excellent scientists from around the world."

New recruits should have little cultural shock. "We cherish diversity in AstraZeneca," says Hallam. "We have many nationali-

CONTINUED ➤

Pharmacologist

Department for Psychopharmacology, Depression

We have a vacancy for a pharmacologist within the Department of Psychopharmacology, Depression. The department constitutes part of the division of Psychopharmacology with responsibility for the in vivo characterisation of compounds with potential utility in the treatment of affective disorders. We are currently 10 employees in the department.

Your job

You will be responsible for the use and setting up of behavioural models relevant for the characterisation of antidepressants and anxiolytics. Responsibilities include management and organisation of the daily work for technicians, planning and execution of experiments and communication of the results. You will participate in all stages of drug discovery projects through participation in interdisciplinary project groups.

Your qualifications

You have a background in biological sciences with a PhD in neuropharmacology and some post-doctoral experience, preferably with industrial experience. Published expertise in the field of behavioural pharmacology would be an advantage. You must have initiative, be able to define your own research projects, work efficiently and be goal orientated. Fluency in English is essential.

Your application

For further information please contact Head of Department Sandra Hogg, ext. 2463 or sho@lundbeck.com. Please send your application quoting reference "Pharmacologist – Psychopharmacology, Depression" and a complete CV to the Personnel Department or to jobs@lundbeck.com. Applications must be received before 3 March 2000.

Biological Research

Biological Research is a part of Lundbeck's Drug Discovery being responsible for molecular biology, molecular pharmacology, neurobiology, neurochemistry and discovery ADME. We are currently 60 employees, 24 PhD level scientists and are now looking for 2 skilled scientists within Protein Chemistry and Signal transduction.

Research Fellow in Signal Transduction

To strengthen our expertise in intracellular signalling pathways involved in neuronal activity we seek a highly motivated candidate for a position in our Biological Research.

Your job

In collaboration with molecular biologists and neurobiologists you will participate in projects involving elucidation of molecular mechanisms of neuropathological conditions, analysis of drug related changes in signalling pathways and establishing new screening tools.

Your qualifications

You have a PhD and 3-5 years postdoctoral and/or industrial experience. Expertise in cell biology, molecular biology, cell-based assays and immunochemical methods will be required, and you are expected to work independently.

Protein Biochemist

Department of Molecular Genetics

In the department of Molecular Genetics we have an open position for a protein biochemist. You will be part of a multidisciplinary Drug Discovery and CNS disease target team consisting of molecular biologists, molecular pharmacologists, neurobiologists and chemists.

Your job

Your contribution to the projects will involve peptide purification and identification, purification of recombinant proteins, analysis of protein-protein interactions, and proteomic analysis in collaboration with external partners.

Your qualifications

You have a PhD or equivalent, two years postdoctoral and/or industrial experience and documented expertise in some of the following areas: protein biochemistry, pharmacology, heterologous protein expression, protein purification, experience with enzymatic and/or cell-based assays.

Your application

For further information about the two positions within Biological Research please contact Divisional Director Peter Høngaard Andersen, ext. 2500 or phqa@lundbeck.com or Head of Department Jan Egebjerg, ext. 3165 or jege@lundbeck.com. Please send your application quoting reference "Research Fellow" or "Protein Biochemist" and a complete CV to the Personnel Department or to jobs@lundbeck.com. Applications must be received before 3 March 2000.

Our advantages

The positions offer challenging assignments in an inspiring international environment. Essential for all our future employees is their desire and ability to communicate and collaborate effectively with colleagues as members of a multidisciplinary project team. The positions are located at our head office in Copenhagen, Denmark.

H. Lundbeck A/S is an international pharmaceutical company.

Our research is focused exclusively on drugs for the treatment of diseases in the central nervous system. We operate globally and exports account for 95% of the turnover, which exceeded 3 bn in 1998. We market and sell our products in 70 countries.

The Lundbeck Group has 2655 full-time employees whereof approximately half work in Denmark. We are working consciously at creating ideal working conditions for our employees, where all activities are based on respect for the individual.

H. Lundbeck A/S

Ottiliavej 9

DK-2500 Copenhagen-Valby

Phone +45 36 30 13 11

www.lundbeck.com

H. Lundbeck A/S

Specialists in psychiatry, pioneers in neurology



ties, including American, British, Danish, and Swedish employees here. The biggest cultural difference new employees may experience is between our culture and that of other pharmaceutical companies. AstraZeneca values its scientists very highly and values the importance of a stimulating external environment."



• • • **HØRSHOLM, DENMARK:** "We have some very good collaborations," says Torbjørn Bjerke, executive vice president for research and development at ALK-Abelló, a pharmaceutical company that specializes in vaccines for allergies. "We work with the Max Laboratory at the University of Lund and the Institute of Chemistry at the University of Copenhagen and with different allergy labs. We're starting a collaboration with the Medicon Valley subsidiary of Structural Bioinformatics of San Diego, California."

Collaborative projects are becoming more common as increasing numbers of overseas companies set up subsidiaries in the Valley. "They're coming from abroad because of the good technical expertise in the area, as well as tax regulations that encourage new companies," says Bjerke. "It's a wonderful place to be in terms of collaborative chances."

Bjerke emphasizes that the Valley has worked effectively without the Øresund bridge. However, he continues, once the bridge opens, "I think it will speed up collaborations between companies and institutions in Sweden and Denmark."

He expects the bridge to make it easier for ALK-Abelló to recruit good scientists. "Swedish scientists are focusing on the idea that, when the bridge opens, they will be able to take a train from Lund and be in Copenhagen in 45 minutes," Bjerke says. "That opens up new hiring opportunities for us in Sweden." Michael Spangfort, ALK-Abelló's head of research, already makes the daily commute to Denmark by hovercraft from his home near Lund.

The company doesn't restrict its recruiting to Scandinavia. "We very much focus on getting the best people from anywhere necessary," Bjerke explains. "We focus on good molecular biologists, protein chemists, and structural biologists." Beyond scientific skills, he adds, "it is very important that recruits have the right personality and enthusiasm."

Overseas recruits should have no difficulty adapting to life in the Valley. "The language of the R&D lab is moving more and more towards English as we are a global company," says Bjerke. "We hope that they will adapt to the Danish language. But we have seen no difficulties, because we have an international atmosphere."

• • • **COPENHAGEN, DENMARK:** As chief adviser at the University of Copenhagen, Marianne Bigum has an insider's view of the local labor market and of potential new companies that set up shop in the Medicon Valley. "Some start-ups are coming out of the University of Copenhagen and the Technical University," she says. "We are now building up a patent organization at the University. We'll go after European, American, and Japanese patents." That should encourage academic researchers to safeguard their discoveries for possible use in the commercial sector.

A new Center for Biotechnology Research and Innovation, created by a group of academic institutions, will also feed into Valley firms. "The University of Copenhagen will host it, on premises very close to the University and the University Hospital, and will coordinate its activities once it starts," says Bigum. Ironically, the Danish government is cutting funds for universities. However, says Bigum, "the Minister of Research has promised government funds to run the new center. Universities taking part in the center will put in their own money as well."

Construction doesn't stop there. "We hope to build a research park for biomedical companies in the same area as the center to house start-ups stimulated by the universities and the new Center, as well as established companies," says Bigum.

Øresund University, meanwhile, acts as a university without walls. "The collaboration within the Øresund University is already well developed through a coordinated research strategy. Life science, including biomedicine, is one of the four main priority areas. As a consequence, we focus on collaboration in education at the graduate and postdoctoral level," says Bigum. For example, the Swedish University of Agricultural Sciences and the Agricultural University of Copenhagen now offer a joint degree in horticulture. The concept also encourages international exchanges of people. "We already have some Swedish students," says Bigum. "We are quite sure that the number will grow when the bridge is there." To encourage such exchange, the mayors of Copenhagen and Malmö have proposed that students be allowed to cross the bridge toll-free.

Academic institutions in the Medicon Valley already recruit students and faculty from further afield. Nine of 40 senior staff at the University of Copenhagen's Institute of Molecular Biology are non-Danish, while 40 percent of the Institute's 35 postdoctoral fellows are foreign. As Bigum sees it, outsiders should have no problem fitting into the Valley. "It's fairly easy to get along with people here," she says. "We're quite friendly and open, and most people speak quite good English." ■

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

AstraZeneca is one of the world's leading pharmaceutical companies, with approximately 50,000 employees. Operations are based on innovative R & D of pharmaceuticals in a number of therapeutic areas. AstraZeneca has a global discovery organisation largely focused in Sweden, the US and the UK with significant investments in state of the art technologies. For further information, see: www.astrazeneca.com.

AstraZeneca R&D Lund is the world-wide center for respiratory drug development and has approx. 1000 employees.

New Discovery Opportunities

AstraZeneca has recently announced a new R&D Strategy and following this a number of opportunities have arisen at AstraZeneca's state of the art Discovery Unit in Lund, Sweden, which is now focused on Respiratory Diseases. These positions have been created as we re-shape our Discovery effort to make full use of our existing capabilities in genomics, proteomics and patient genetics and apply them to drug hunting for use in COPD and Asthma.

Section Leader Positions

These will be senior positions within the AZ Discovery organisation requiring high level organisational, supervisory and leadership skills. Successful applicants will have excellent communication skills and thorough understanding of drug discovery and drug development with a proven track record of leading a group to innovative and successful outcomes.

LO projects, Medicinal Chemistry, ref.no. 05/00

Highly motivated medicinal chemist sought with industrial experience and an international reputation as evidenced by independent research, publications, patents and presentations.

Respiratory Scientist, ref.no. 06/00

This individual will have a thorough understanding of respiratory disease pathology and a demonstrated ability to develop relevant in vivo models. Candidates should have an international reputation in asthma and/or COPD.

Team Leaders

Medicinal Chemistry, ref.no. 07/00

To lead a chemistry team to candidate drugs, including improvement of DMPK, potency, selectivity and toxicological profiles.

Research Scientists

Medicinal Chemistry, ref.no. 08/00

Ph.D. level positions in organic chemistry/medicinal chemistry and also at B.Sc. level in organic chemistry with proven skills in synthetic organic chemistry.

Radiochemistry, ref.no. 09/00

The position requires a Ph.D. in synthetic organic chemistry, or equivalent.

Computational Chemists, ref.no. 10/00

Ph.D. (or equivalent) in an area of physical bio-organic chemistry with extensive experience in computational chemistry.

Physicochemical Characterisation, ref.no 11/00

Ph.D. in analytical/organic chemistry or equivalent competence.

For further information about any of these positions, please contact Anette Crudo by phone: +46 46 33 71 77 or by e-mail: anette.crudo@astrazeneca.com

We'd like to hear from you!





Career Opportunities for Postdoctoral Fellows and Ph.D. Students in Microtechnology

The Microelectronics Center (MIC) has committed to further expand activities in developing microsystems for applications in chemistry and life sciences. We seek several researchers with various scientific backgrounds to join our multidisciplinary team of chemists, biologists, physicists, and engineers. This well funded Micro Total Analysis Systems project is a collaborative effort between the Bio/Chemical MicroSystems and Micro Electro Mechanical Systems groups at MIC and the Fluid Mechanics group at the Technical University of Denmark (DTU). MIC is a national research center for advanced microtechnologies and operates a state-of-the-art process facility, chemical laboratories, biology laboratories, and optical laboratories. The Fluid Mechanics group is part of the Department of Energy Engineering at DTU and operates experimental and computational facilities in which basic as well as applied fluid mechanical problems are investigated.

The participating research groups are committed to performing scientific research, educating scientists and engineers, and transferring new technologies to industry through joint programmes. We offer an excellent research environment with opportunities for individual growth in the attractive Oeresund region and in close vicinity of wonderful Copenhagen.

Applications are invited for postdoctoral fellow and Ph.D. student positions in any of the following areas: microsystem technology, micro total analysis systems, semiconductor technology, process technology, sensor technology, micro optics, micro electro mechanical systems, computational fluid dynamics, numerical analysis, and scientific computing.

Please send your application, curriculum vitae, and the names of two references to: **Dr. Pieter Telleman, Microelectronics Center, Orsted's Plads, Building 345 east, DK-2800 Kgs. Lyngby, Denmark, Tel. +45-4525-6303, Fax +45-4588-7762, E-mail: pt@mic.dtu.dk.**

SYMPOSIUM



Svenska Läkaresällskapet
The Swedish Society of Medicine

An International Berzelius Symposium Medicine and the Media

August 31-September 1, 2000
Stockholm, Sweden

- Selection of Medical News. *Tim Johnson, ABC Television, USA*
- Media and Medicine – Polarisation or partnership? *David Finer, Karolinska Institutet, Sweden*
- Medicine in Media – A battle for attention. *Dorothy Nelkin, New York University, USA*
- Media Tools and Effects. *Joann Rodgers, Johns Hopkins Medical Institutions, USA*
- Improving Medical Journalism. *Carl Johan Sundberg, Karolinska Institutet, Sweden*
- Searching for Credibility – Who can we trust? *George Lundberg, Medscape, USA*

More information

The Swedish Society of Medicine, P O Box 738, SE-101 35
Stockholm, Sweden.

E-mail annie.melin@svls.se Internet: www.svls.se/media.html

Phone +46 (0) 8 440 88 78. Fax +46 (0) 8 440 88 84.



CENTER FOR GENOMICS RESEARCH (CGR)

AT

KAROLINSKA INSTITUTET

SEEKS TO IDENTIFY

POSTDOCTORAL FELLOWS AND/OR

JUNIOR FACULTY MEMBERS

IN THE FIELD OF HUMAN GENOME VARIATION

The CGR, an academic department at Karolinska Institutet's main campus in Stockholm, was launched in 1997. The CGR consists of units for functional genomics, genomics technologies and bioinformatics, and it will now expand its activities in clinical genomics. In particular, human single nucleotide polymorphism (SNPs) will be studied in complex diseases and in functional contexts. Laboratories recruiting are those of Dr Anthony Brookes and Professor Claes Wahlestedt.

For further information, see www.ki.se or www.cgr.ki.se. Please direct enquiries and applications to Prof. Claes Wahlestedt (CGR Chairman) or Anthony Brookes, CGR, Karolinska Institutet, S-171 77 Stockholm, Sweden (E-mails; Claes.Wahlestedt@cgr.ki.se, Anthony.Brookes@cgr.ki.se).

Individual Grants for the Advancement of Research Leaders

The Swedish Foundation for Strategic Research announces for competition twenty individual grants, each of SEK 10 million (appr. USD 1.2 million), to younger outstanding scientists. The following areas and inter- or cross-disciplinary combinations thereof are open for applications:

Life Sciences, Materials Science, Microelectronics, Information Technology, Production Engineering, Process Engineering, Applied Mathematics, Applied Physics and Applied Chemistry.

The grant holder is expected to perform innovative research at a Swedish university normally for six years. Applications are invited from researchers in Sweden as well as in other countries. In the latter case, applicants shall be able to demonstrate a Swedish connection. The grant is intended for building up a research group, although part of the grant may be used for the recipient's own salary.

In a first step of the selection process, a short summary of future research plans, previous research accomplishments, a short CV, and three letters in support of the application are to be at the Foundation by 2 May, 2000.

For guidelines and further information on the application procedure, please visit the web site of the Foundation, www.stratresearch.se.

Chaired by former Swedish Prime Minister Ingvar Carlsson, the Swedish Foundation for Strategic Research is an independent major funding body working outside the Swedish government budget. Financing research in natural science, engineering and medicine it was established by a parliamentary decision in 1994 with a capital of SEK 6 000 million (appr. USD 750 million) from the earlier wage-earner funds.

The primary goal of the Foundation is to promote the development of vigorous research environments of the highest international standard with a view to enhancing Sweden's long-term competitiveness. The Foundation maintains informal co-operation with Swedish research councils and other agencies financing basic and applied research.

The total expenditure of the Foundation is some SEK 1 000 million (USD 125 million) per year in the period 2000-2002.

Through an active investment policy and favourable stock exchange development, the capital assets of the Foundation amount to SEK 12 000 million as of January 2000. According to its statutes, the activities of the Foundation may in due course result in the expenditure of all its assets. Presently the lifetime of the Foundation is expected to reach well into the 2020s.



Box 70483, SE-107 26
STOCKHOLM, Sweden

Call for Abstracts

8th International TNF Congress on Tumor Necrosis Factor and Related Cytokines

**May 14-18, 2000, Royal Garden Hotel,
Trondheim, Norway**

The members of the ever expanding TNF family including TNF α , LT α , LT β , FasL, TRAIL, TRANCE, and their receptors play key roles in the immune system by contributing to many different processes, including inflammation, apoptosis, lymphoid development, T-B cell cooperation, and sepsis. An exciting mix of recent discoveries in basic science and clinical applications will be presented in the format of symposia, poster sessions, and research-symposia. The latter will be selected from the submitted abstracts allowing for presentation of the most current studies. A special symposium is planned to cover recent developments in Toll like receptors in infectious diseases.

Invited Speakers

Dirk Anderson, USA	Daniel L. Kastner, USA
Avi Ashkenazi, USA	George Kollias, Greece
Frances Balkwill, UK	Daniela Maennel, Germany
Gail Bishop, USA	Tak Mak, USA
William J. Boyle, USA	Douglas Mann, USA
Jeffrey Browning, USA	Fabienne McKay, USA
Anthony Cerami, USA	Shigekazu Nagata, Japan
Abraham de Vos, USA	Sergei Nedospasov, Russia
Nancy Ruddle, USA	Marc Feldman, UK
Craig Smith, USA	Matthew Fenton, USA
Kevin Tracey, USA	Richard Flavell, USA
Alem Truneh, USA	Brian Foxwell, UK
Jurg Tschopp, Switzerland	Paul Godowski, USA
Alexander Poltorak, USA	David Goeddel, USA
Anne Goldfeld, USA	Harald Wajant, Germany
Douglas Golenbock, USA	David Wallach, Israel
Tasuku Honjo, Japan	Carl Ware, USA
Marja Jaatale, Denmark	Hao Wu, USA
Michael Karin, USA	Arturo Zychlinski, USA
Alexander Eggermont, The Netherlands	
Sander Van Deventer, The Netherlands	

The deadline for registration and abstract submission is **February 21, 2000**

**8th International TNF Congress
NTH Videre
N-7491 Trondheim, Norway**

Phone: (+47) 7359 5254

Fax: (+47) 7359 5150

Email: 8tnf@adm.ntnu.no

<http://gensgi1.unigen.ntnu.no/tnf2000>

Roche

Pharmaceuticals

Expert in Lipid Metabolism

Who we are

F. Hoffmann-La Roche Ltd, one of the world's leading healthcare companies, has a long-standing reputation for successful and innovative drug development. Our Cardiovascular Research department in Basel, Switzerland, is expanding its target discovery activities in the area of dyslipidemias. To round out our team, we are seeking a senior biochemist with a strong background in lipoprotein metabolism and a broad knowledge of the biological systems regulating lipid metabolism.

The position

You will lead a team dedicated to discovering novel drug targets and agents for the treatment of vascular diseases. Team spirit, innovation and a multidisciplinary approach are required for success in this challenging therapeutic area.

Who you are

You must have a PhD in biochemistry or molecular biology, 3 years' relevant post-doctoral experience, in-depth knowledge of lipid biochemistry techniques and an innovative approach to target discovery. A solid background in metabolic diseases, particularly experience with in vivo models of lipid metabolism, would be an advantage. You must be fluent in English.

Who to contact

If the above profile fits your background and experience and you are interested in this challenging position, feel free to contact Dr Cornelia Hertel at cornelia.hertel@roche.com for further information or please send your application, with full supporting documentation, to: F. Hoffmann-La Roche Ltd, Mr Werner Aschwanden, PSPB, P.O. Box, CH-4070 Basel, quoting reference As2759.

Max-Planck-Institute for Biochemistry
Department of Cell Biology
(Martinsried-Munich, Germany)

Autonomous Group Leader Positions

Applications are invited for senior research associate/autonomous group leader positions within the Cell Biology Department of the Max-Planck-Institute for Biochemistry in Martinsried-Munich. The successful applicants are expected to develop strong research programs related to one of the following subjects: **Cell Cycle Checkpoints/Regulation of Mitosis/Centrosome Biology/Protein Analysis by Mass Spectrometry.** (Information on the Institute's research activities can be found at <http://www.biochem.mpg.de>).

Applicants must have a doctoral degree and a strong research record. Disabled applicants will be given preference over others of equal suitability. The Max-Planck-Institute wishes to increase the number of women employed in areas where women are underrepresented and thus encourages women to apply.

The duration and initial level of the appointments will depend on prior experience (up to five years and BAT Group Ib, respectively). Applications, including Curriculum Vitae, list of publications, and addresses of three referees, should be sent to: **Prof. Dr. Erich A. Nigg, MPI for Biochemistry, Dept. of Cell Biol., Am Klopferspitz 18a, D-82152, Martinsried, Germany** (For inquiries: nigg@biochem.mpg.de)

Stockholm University

Two Ph.D. positions are available (from spring 2000) in the field of plant physiology, specifically in plant stress and molecular physiology, at the Department of Botany, Stockholm University, Stockholm, Sweden. The positions require molecular, genetical, biochemical and biophysical skills, some of which the candidate will acquire during the Ph.D. programme.

Both positions will start as 2-year fellowships (12.500 SEK/month) followed by 2-year employment (the salary regulated by the faculty). The positions may be associated with up to 20% teaching, but will then be prolonged accordingly.

If you are interested in such a position, please contact Dr Stanislaw Karpinski for more information at : Department of Botany, Stockholm University, SE-106 91 Stockholm, Sweden, Phone : +46 (0)8 161 214; Fax: +46 (0)8 16 55 25, E-mail : Stanislaw.Karpinski@botan.su.se

Applications with list of merits, Curriculum Vitae (CV) and copy of the university diploma should be submitted to Prof. Ove Eriksson, Head of the Department of Botany, Stockholm University, SE-106 91 Stockholm, Sweden.

Deadline for applications is 1st of March 2000.



R.E.D. Laboratories NV

R.E.D. Laboratories NV is an early stage biotechnology company located in Belgium. We are developing diagnostics and therapeutics for Chronic Fatigue Syndrome and other chronic immune diseases based on the company's *unique* scientific platform focusing on the role of interferon-inducible enzymes in these diseases. Our company has solid financial support from four leading Belgian venture capital funds, including DEXIA Ventures, and one US pharmaceutical company.

We now seek the following key persons to help us develop our diagnostics and therapeutics product platforms to lead our company successfully into the new century. *These positions require flexibility and an entrepreneurial spirit*, and our new team members will be rewarded with a total compensation package, including salary and equity.

Medical Science Writer (Job Code MSW)

You must have an M.D. (M.D./Ph.D. preferred) with a strong background in biochemistry. Experience with conducting clinical trials is essential, as is a working knowledge of statistics and analytical methods used to evaluate patient data. You should have an extensive publication record with articles successfully published in the leading scientific and medical literature. Position may require intermittent travel to the USA and within Europe.

Scientist, Therapeutics Development (Job Code TD)

You should have a Ph.D. and/or M.D. with experience in screening libraries of small molecule compounds using a variety of in vitro biochemical assays. A working knowledge of establishing pre-clinical and clinical trials is advantageous, preferably with a background in pharmaceutical industry-sponsored trials focusing on immune system diseases.

Scientist, Diagnostics Development (Job Code DD)

You will need a Ph.D. in human immunology, molecular biology, or biochemistry plus one to two years of experience in any of the phases of antibody-based diagnostics development (initial protein isolation and purification, cloning, expression, or antibody generation and screening). Alternatively, you may have one to two years of experience in gene expression technology, cDNA library production, and PCR or other nucleic acid amplification methodologies.

All R.E.D. Labs team members are encouraged to attend national and international meetings to present research and establish contacts within industry and academia. These positions require fluency in English and at least one other European language. Please fax your curriculum vitae with cover letter to 00-32-2-463-4269. You may also mail your information, indicating Job Code, to:

R.E.D. Laboratories NV

Kranenberg 6

1731 Zellik

Belgium

R.E.D. Laboratories NV is an equal opportunity employer



THE UNIVERSITY OF BIRMINGHAM

SCHOOL OF BIOSCIENCES

LECTURESHIPS/SENIOR LECTURESHIPS

The School, recently formed by merger of the Schools of Biochemistry (RAE 5, TQA 23) and Biological Sciences (RAE 4, TQA 24), seeks individuals with excellent records in research and ability in teaching for the following posts:

Population Ecologist having a good knowledge of theoretical population ecology, with experience in population modelling/quantitative biology and the application of these approaches to areas such as insect ecology, vertebrate ecophysiology or conservation biology. **Ref: S35292/00S**

Population Geneticist with strengths in experimental and/or theoretical population genetics of plants, animals or micro-organisms. Interest in applying post-genomic information to genetical models or in population modelling relevant to ecology, biodiversity and conservation would be welcome. **Ref: S1742/00S**

Quantitative Geneticist with a strong research interest in quantitative trait genetics, with particular emphasis on QTL analysis, mapping and comparative genomics. People wishing to apply their research to breeding and conservation problems and those with interests in gene action and functional genomics would be welcome. **Ref: S35293/00S**

Molecular Toxicologist with strengths in the area of pharmacogenetics or toxicogenomics, although related areas will be considered. An interest in gene expression in toxic or stress responses, or the molecular genetics of individual susceptibility to xenobiotics would be welcome. **Ref: S35295/00S**

Applicants should hold a PhD in a relevant area and have a record of research achievement in postdoctoral work. Excellence in research will be the most important criterion. The School houses the Glaxo-Wellcome Biocomputing Unit and JIF-funded Genomics Laboratories as well as a range of state-of-the-art laboratory and field facilities relevant to these posts.

Starting salaries for Lectureships will be in the range £17,238 - £30,065 and more senior positions will be available for outstanding candidates. Personal Fellowship holders are encouraged to apply for proleptic positions.

Informal enquiries to Professor Nigel Brown (Tel: +44 (0)121 414 5465, Fax: +44 (0)121 414 5907, E-mail: N.L.Brown@bham.ac.uk) or to Professor Ian Trayer (Tel: +44 (0)121 414 5402, Fax: +44 (0)121 414 2597, E-mail: I.P.Trayer@bham.ac.uk). Details of the posts and the School are available at <http://www.bham.ac.uk/biosciences/>

Application forms for all posts (returnable by Monday 13 March 2000) and details from Personnel Services, The University of Birmingham, Edgbaston, Birmingham B15 2TT. (Tel: +44 (0)121 414 6486, Web site: <http://www.bham.ac.uk/personnel/>). Please quote appropriate reference number(s).

Working towards equal opportunities



St George's Hospital
Medical School

University of London

and
British Heart Foundation

JOHN PARKER BRITISH HEART FOUNDATION CHAIR OF MOLECULAR CARDIOVASCULAR SCIENCES

The School invites applications from individuals of outstanding achievement and promise in molecular cardiovascular sciences. The appointed individual (clinical or non-clinical) will already have major grant support at BHF programme level or its equivalent, or can demonstrate a clear ability to do so. An honorary clinical contract with St George's Healthcare will be available for an appropriately qualified individual.

The appointed individual will take the lead in appointing a substantial group of investigators and support staff with core funding of approximately £400,000 for an initial period of seven years to develop a strong interdisciplinary bioscience group of relevance to the broad agendas of cardiovascular research.

The School has a strong Department of Cardiological Sciences (starred for excellence in the UK Higher Education Funding Council Research Assessment Exercises in 1992 and 1996). It is anticipated that the new group will work closely with this department and also with other relevant research strengths in the School (which include medicine, pharmacology, epidemiology, physiology, embryology and genetics).

Full details and an application form are available from the Personnel Officer, St George's Hospital Medical School, Cranmer Terrace, London SW17 0RE, 020 8725 5020 (24-hour answerphone), website www.sghms.ac.uk, or by email: personnel@sghms.ac.uk Closing date 11 March 2000. Please quote reference 301/00.

The School is an Equal Opportunities Employer

Science

www.sciencecareers.org

UPCOMING

ADVERTISING SUPPLEMENT

7 April 2000 Issue

on

The Netherlands

Deadline : 21 March 2000

This second report in a series to be published quarterly will provide practical information on career opportunities as well as vital statistics such as cost of living and average salaries in the Netherlands.

**To Advertise Your Recruitment Opportunities,
Please contact Deborah Cummings on:**

Phone: +44 (0) 1223 326 500

Fax: +44 (0) 1223 326 532

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

Your International Recruiting Partner

LABORATORY OF HUMAN BACTERIAL PATHOGENESIS

Employment Opportunities

The Laboratory of Human Bacterial Pathogenesis (LHBP) at the National Institute of Allergy and Infectious Diseases, National Institutes of Health is currently recruiting for three tenured/tenure track scientists. The laboratory is located at the Rocky Mountain Laboratories in the scenic Bitterroot Valley in Hamilton, Montana. The LHBP is an interdisciplinary group exploring fundamental molecular processes of host-pathogen interaction. Research in this new laboratory is primarily concerned with the molecular basis of pathogenesis of the following bacteria: Group A *Streptococcus*, *Mycobacterium tuberculosis*, *Borrelia* species, *Yersinia pestis*, and *Neisseria gonorrhoeae* (see <http://www.niaid.nih.gov/dir/labs/lhbp.htm>; <http://www.niaid.nih.gov/dir/labs/lmsf.htm>). Research opportunities are being significantly expanded in the area of group A *Streptococcus*, *Mycobacterium tuberculosis*, and *Staphylococcus aureus*. However, exceptional candidates working in other areas of human bacterial pathogenesis will also be considered and are encouraged to apply.

Individuals selected for a tenure track position are expected to build a dynamic and productive research group. Applicants for tenured positions must have an international reputation and well-documented evidence of ongoing independent accomplishments. Laboratory facilities, start-up and sustained research funds, and salary will be competitive with premier academic institutions. The facility is undergoing significant scientific expansion. Facilities are available for state-of-the-art genomic analysis; electron and confocal microscopy, and other imaging techniques; biosafety level-3 pathogen research; and a vivarium that includes non-human primate research capabilities. Other scientific interests of investigators at this facility include chlamydia (<http://www.niaid.nih.gov/dir/labs/licp.htm>) and persistent viral diseases (<http://www.niaid.nih.gov/dir/labs/lpvd.htm>).

2 Positions in the Pathogen Molecular Genetics Section

We seek tenured/tenure-track scientists whose research efforts focus on the molecular biology of host-pathogen interactions in Group A *Streptococcus*, *Mycobacterium tuberculosis*, or *Staphylococcus aureus*. Individuals using contemporary molecular genetic approaches to investigate host-pathogen interactions or identify novel mechanisms to control these pathogens are especially sought. Please direct programmatic inquiries to: **Dr. James M. Musser, Chief, LHBP by e-mail: jmusser@niaid.nih.gov**

Position in the Pathogen-Vector Molecular Interaction Section

We seek a scientist whose research complements ongoing work in the Laboratory of Human Bacterial Pathogenesis and focuses on the molecular basis of pathogen-vector or host-pathogen interaction, broadly defined, in *Borrelia* species or *Yersinia pestis*. However, exceptional candidates working on other important bacterial pathogens with an arthropod host will also be considered and are encouraged to apply. Please direct programmatic inquiries to: **Dr. James M. Musser, Chief, LHBP by e-mail: jmusser@niaid.nih.gov**

APPLICATION PROCESS: Applicants must be U.S. citizens, resident aliens, or nonresident aliens with or eligible to obtain a valid employment authorized visa. Salary depends on degree and qualifications. Salary up to \$157,000 per annum. Other incentives may be available. A curriculum vitae, bibliography, three letters of reference, a detailed statement of research interests and selected publications must be submitted by March 3, 2000 to:

**Ms. Kim Tran
Office of Human Resources Management, NIAID
Building 31, Room 7A27
31 Center Drive, MSC 2520
Bethesda, Maryland, 20892-2520.**

Applicants interested in applying for more than one discipline must submit a complete package for each and cite the vacancy announcement number and scientific opportunity. The vacancy announcement numbers are: AI-99-201 for Pathogen Molecular Genetics, and AI-99-203 for Pathogen-Vector Molecular Interaction. All information provided by applicants will remain confidential and will only be viewed by authorized officials of the NIAID.

NIH is an Equal Opportunity Employer



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 products and services 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.



The R.W. Johnson Pharmaceutical Research Institute, located in Raritan, New Jersey, conducts pharmaceutical research in therapeutic areas including anti-infectives, central nervous system, dermatology and oncology.

Postdoctoral Scientists

Signal Transduction in T-cell Activation and Innate Immunity

These positions are part of ongoing basic research projects investigating signalling from IL-1, TNF, LPS, and Toll-like receptors and from co-stimulatory receptors on T-cells. The projects are fundamental in nature, with publication of results expected. The Department offers a wide variety of expertise, technology and support.

The ideal applicant will be a Ph.D. candidate or recent Ph.D. graduate with 0-2+ years' postdoctoral experience in immunology, molecular biology, cell biology or a related discipline. Experience in basic molecular biological techniques and familiarity with signal transduction mechanisms are required.

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. Please apply directly on-line at our web site www.jnj.com or forward a scannable resume, noting operating company and Req Code 992639SCI, to: Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597. Please note, resumes received electronically via jnj.com are reviewed within 24 hours. Mailed resumes are reviewed within 3 business days after receipt. We are an equal opportunity employer totally committed to diversity.

Some recent publications regarding the research described above:

1. IRAK requirement for optimal induction of multiple IL-1 signaling pathways and IL-6 production. (1998) J. Exp. Med. 187: 2073-2079.
2. Defective IL-18 mediated Th1 and NK response in IL-1 receptor associated kinase (IRAK) deficient mice. (1999) J. Exp. Med. 189: 1129-1138.
3. p38 alpha mitogen-activated protein kinase is activated by CD28-mediated signaling and is required for IL-4 production by human CD4+CD45RO+ T cells and Th2 effector cells. (1999) J Immunol. 162: 7110-9.
4. T cell activation signals up-regulate p38 mitogen-activated protein kinase activity and induce TNF-alpha production in a manner distinct from LPS activation of monocytes. (1999) J Immunol. 162: 659-68.

Johnson & Johnson

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

www.jnj.com



MAYO CLINIC CAREER SCIENTIST

Individuals with an M.D. and/or Ph.D. are invited to apply for a position whose primary responsibility will be to direct an independent cancer research program within the Division of Experimental Pathology (for information on research programs see www.mayo.edu/research/experimental_pathology/people) as a member of the Department of Laboratory Medicine and Pathology as well as the Mayo Cancer Center (see www.mayo.edu/cancercenter/). It is expected that the successful applicant will have demonstrated the ability to support their ongoing research activities through extramural awards obtained through a competitive process, and will additionally have established a publication record in quality journals. Mayo Clinic is a non-profit, physician-led clinical practice integrated with education and research in a unified multi-campus system. Excellent facilities are available for research including outstanding institutional core facilities and a General Clinical Research Center.

Interested individuals should direct their curriculum vitae and names of three references to:

C. David James, Ph.D.
Chair, Experimental Pathology Search Committee
Mayo Clinic
200 First St. SW
Hilton Bldg., Room 820-D
Rochester, MN 55905

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



Faculty Positions in Vascular Cell and Molecular Biology



The Blood Research Institute of The Blood Center of Southeastern Wisconsin, in conjunction with the Cardiovascular Research Center of the Medical College of Wisconsin, has established a Program in Vascular Cell and Molecular Biology, and is seeking outstanding faculty candidates at all levels to complement existing research activities. Current faculty interests include gene expression during coronary angiogenesis, murine models of the role of coagulation in vascular development, cell adhesion and signaling receptors in blood and vascular cells, regulation of vascular tone and adrenal steroidogenesis by endothelial factors, mechanisms of vaso-occlusion in sickle cell disease, molecular biology of von Willebrand factor, and regulation of cerebral blood flow. Candidates with interest in these and other areas of vascular biology are encouraged to apply.

Ample laboratory and office space, as well as an extremely generous start-up package will be provided. Faculty will be expected to develop and maintain extramural grant support and to secure a faculty appointment within one of the basic or clinical Departments at MCW.

For further information, please send your CV, a letter detailing your specific training and research interests, and the names and addresses of three references to:

Peter J. Newman, Ph.D.
Director, Program in Vascular Cell and Molecular Biology
Blood Research Institute
P.O. Box 2178
Milwaukee, WI 53201-2178
pjnewman@bcsew.edu
www.bloodctrwise.org
www.mcw.edu

The Blood Center and MCW are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.

With the right people putting the pieces together,
the opportunities are unlimited.

Axys Pharmaceuticals is a leader in the integration of drug discovery technologies from gene identification through clinical development. We are focused on the discovery of small molecule therapeutics, and have several promising research collaborations with world-class pharmaceutical companies, and we currently have an excellent opportunity for dedicated scientific leaders & researchers to join our extraordinary R&D team.



Scientist, Tumor Biology

As our Tumor Biology Scientist, you will develop, characterize, and implement in vivo tumor and angiogenesis models for profiling drug candidates evolving from ongoing oncology drug discovery programs. You will also evaluate proprietary compounds from our oncology chemistry efforts in established in-house models and/or in collaboration with academic and contract organizations. To be successful in this position, you need 2 to 5 years' post-Ph.D. experience involving the development, implementation, and utilization of cell and animal oncology models. This would include experience working with standard tumor models in rats and mice, xenograft models, and more sophisticated models to evaluate various phases of the processes of tumor progression and angiogenesis. We prefer candidates experienced with flow cytometry, gel electrophoresis, Western blotting, PCR, cell culture, and ELISA. Significant experience with in vivo tumor models is a must, and a significant publication record is expected. (Job# N99-076-SCI)

Research Associate/ Senior Research Associate

You will develop/execute bioanalytical procedures, including pharmacokinetic sample extraction method, LC/MS/MS optimization, and data analysis in support of high throughput discovery research. You will also validate analytical methods used to support drug development and apply LC/MS/MS and/or HPLC to drug metabolite characterization. The position requires a BS/MS in pharmaceutical sciences, biopharmaceutics, biochemistry, bioanalytical chemistry or related field, and at least 2 years' experience analyzing compounds in biological matrices. (Job# N99-078-SCI)

Research Associate

In this key role, you will implement/run in-vivo models & cell-based cancer assays to test potential anti-cancer therapeutic agents. The position requires a BS or MS in cell biology, pharmacology or a relevant discipline; hands-on experience in mammalian cell culture, running gels, and ELISAs; PC proficiency; the ability to work independently and as part of a team; and excellent communication skills. The successful candidate will be well-versed in the biochemical analysis of proteins and other tissue & cellular components, including techniques such as immunohistochemistry, immunofluorescence, Western Blotting, immunoprecipitation, flow cytometry, ELISA, and Northern Blotting. Must be willing to work with animals. (Job# N99-081-SCI)

Research Associate Pharmacology

You will be involved in the implementation and running of in-vivo and cell-based assays of cancer for testing potential anti-cancer therapeutic agents. You should be well-versed in performing biochemical analysis of proteins and other tissue and cellular components, including techniques such as immunohistochemistry, immunofluorescence, Western Blotting, immunoprecipitation, flow cytometry, ELISA, and Northern Blotting. To be successful, you need hands-on experience in mammalian cell culture, running gels, and ELISA; a willingness to work with animals; and computer literacy. This position requires a BS or MS in cell biology, pharmacology or a relevant discipline and the ability to work independently and as part of a team. Good communication skills and team spirit a must. (Job# N99-070-SCI)

Research Associate Preclinical Sciences

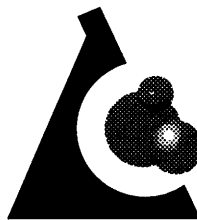
As part of a research team focusing on drug discovery for new therapeutics towards cancer and other diseases, you will perform/assist with in vitro and in vivo metabolism and pharmacokinetic studies. The position requires a BS/MS in chemistry, biochemistry, biology, pharmaceutical sciences, physiology or related field with at least 2 years of relevant lab experience, including quantitative analysis with HPLC. Experience conducting in vitro metabolism using purified enzymes, microsomes, hepatocytes and plasma is preferred. Experience performing in vivo pharmacokinetics, small animal surgery and computer data analysis is desired. (Job# N00-001-SCI)

Animal Facilities Manager Preclinical Services

You will manage part-time staff and perform the general duties of facilities management, including ordering animals & supplies, coordinating animal use & surgical preparations, and maintaining facilities records. You will also perform cannulation surgeries, anesthetization, intravenous dosing, data collection/analysis, animal procedure training, and literature searches to investigate/adopt new methodologies. The successful candidate will be a member of the IACUC Committee, assist/implement new animal models, and write/review protocols, reports, and SOPs. The ideal candidate will possess a degree in animal husbandry, veterinary sciences, physiology or related field or a combination of relevant training & experience. AALAS certification preferred. Experience with pharmacokinetics, toxicology, and tumor models a plus. (N99-084-SCI)

We offer an extremely competitive salary, full benefits, and career advancement within a progressive, growing company. Please forward your resume/cv to:

Axys Pharmaceuticals
HR Department
Attn: (Job# _____)
180 Kimball Way
South San Francisco, CA 94080
Email: human_resources@axyspharm.com
We look forward to hearing from you. EOE



A X Y S

www.axyspharm.com

**THE OPPORTUNITY OF A LIFETIME.
EVERY DAY.**



NASA
GODDARD
SPACE
FLIGHT
CENTER

Chief, Earth and Space Data Computing Division

The NASA/Goddard Space Flight Center (GSFC), NASA's designated Center of Excellence for scientific research, maintains a world-class high performance data intensive computing center in support of the Earth and space sciences. GSFC is aggressively seeking applicants for the position of Chief, Earth and Space Data Computing Division (ESDCD), who will have overall responsibility for the conduct, management, planning and implementation of Goddard's Earth Science computing center serving NASA-supported scientists nationally. In the performance of these responsibilities, the Division chief manages three branches, Science Computing, Science Communications Technology, and Applied Information Science.

This is a uniquely exciting time for ESDCD as information science and technology are emerging as principal efforts within NASA and at GSFC. A joint acquisition of a large new computational facility is planned in support of several major NASA/GSFC programs. The High Performance Computing and Communication Earth and Space Science Project (HPCC/ESS) is entering a new phase of building computational science communities to accomplish NASA's challenging mission objectives. New opportunities for collaboration with the University community are being established.

The successful applicant will join the Earth Sciences Directorate and be responsible for providing a vision for information science in the pursuit of NASA goals; programmatic and organizational management; development and implementation of functional responsibilities; personnel management; overseeing the safety, security, and quality goals; management of budgetary actions; long-range technical planning, implementation and operations.

The selectee reports to the Director of the Earth Sciences Directorate and participates as a peer with Science Lab Chiefs and other staff in directorate business, planning and implementation efforts.

Candidates with experience in Earth and space computational science, management of large-scale computing and mass storage systems, software engineering, science data visualization, information systems, and ground and space telecommunications systems are encouraged to apply.

This is a Senior Executive Service (SES) position in the Federal Government. The salary is commensurate with the experience of the successful candidate.

Applicants must submit either an "Optional Application for Federal Employment" (OF-612) or SF-171, "Application for Federal Employment," or a resume. In addition, applicants should submit a professional curriculum vita, a current list of referred publications, and a cogent (approximately 1000 word) statement of career interests. By 1 March 2000, applications should be forwarded to:

NASA's Goddard Space Flight Center
Human Resources Operations Office, Code 113
Attn: Ms. Diedra Williams
Greenbelt, MD 20771

For more information about position requirements and additional application procedures, visit our web site at <http://itjobs.gsfc.nasa.gov>

Equal Opportunity Employer, U.S. Citizenship Required.

THE ART OF DISCOVERY THE SCIENCE OF LIFE

Agouron is a fully integrated pharmaceutical company in San Diego, 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.

Agouron has several opportunities in a variety of disciplines throughout our departments. For detailed information regarding additional opportunities, access our Website at: www.agouron.com

ASSOCIATE SCIENTIST

We seek a mid-level enzymologist within our Biochemistry department to assist in drug discovery research in the area of cancer (mainly tyrosine kinases). Qualified candidates should possess a BS/MS in Biochemistry or related disciplines. Preferred qualifications include 1-3+ years of experience in enzymology (e.g. enzyme assay development, enzyme kinetics, enzyme inhibition). Must possess good communication skills and computer literacy (familiarity with graphic softwares, ISIS database, etc. a plus).

Agouron is a wholly owned subsidiary of Warner-Lambert. For information regarding our parent company, please visit us at: www.warner-lambert.com.



Agouron offers competitive salaries and excellent benefits such as paid medical and dental as well as 401(k). If you have a desire to deliver promising therapeutics to the people who need them most, please send your resume referencing code to: Agouron Pharmaceuticals, Inc., Code 135/CP, 10777 Science Center Drive, San Diego, CA 92121; email: jobs@agouron.com. EOE

www.agouron.com

MEETINGS



Targets & Molecules:



The Science of Drug Discovery

March 8 - 10, 2000

Organized by:

David Stewart, Bruce Stillman & Jan Witkowski

(Cold Spring Harbor Laboratory)

Topics

- Infectious Diseases
- Cancer
- Neuroscience
- Controversial Issues in Intellectual Property

Speakers

Robert Benezra, Sloan Kettering Institute
Dani Bolognesi, Trimeris, Inc.
Martin Citron, Amgen, Inc.
Peter Colman, Biomolecular Research Institute
Judah Folkman, Children's Hospital
Maria Freire, NIH
Edward Gimmi, SmithKline Beecham
Dennis Henner, Genentech
Steven Holtzman, Millenium
Peter Lansbury, Brigham and Women's Hospital
Perry Molinoff, Bristol Myers Squibb
Dennis Selkoe, Harvard Medical School
Randal Scott, Incyte Pharmaceuticals
Laura Shawver, Sugen, Inc.
Lex Van der Ploeg, Merck Research Laboratories
George Yancopoulos, Regeneron Pharmaceuticals

2000 Spring Meetings

Zebrafish Development & Genetics
April 26 - 30, Abstract Deadline, February 2

Molecular Chaperones
& the Heat Shock Response
May 3 - 7, Abstract Deadline, February 9

Genome Sequencing & Biology
May 10-14, Abstract Deadline, February 16

The Cell Cycle
May 17 - 21, Abstract Deadline, February 23

Retroviruses
May 23 - 28, Abstract Deadline, March 1

65th Symposium: Biological
Responses to DNA Damage
May 31 - June 5, Abstract Deadline: March 8

Cold Spring Harbor Laboratory

Meetings & Courses, 1 Bungtown Rd,
Cold Spring Harbor, NY 11724

Email: meetings@cshl.org
Fax: 516-3678845 Phone: 516-3678346

www.cshl.org/meetings/

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR AND CELL BIOLOGY AT THE NIH

Postdoctoral Fellowships are available in the Genetics and Biochemistry Branch, NIDDK, NIH. The Branch is similar to a small academic department and has excellent laboratory facilities. The intramural program of the NIH offers an outstanding research environment. The Branch is located on the main intramural campus of the NIH in Bethesda, Maryland, a 20 minute ride from Washington, D.C.. Applications are invited from individuals of the highest caliber with Ph.D., M.D., or M.D., Ph.D. degrees. Physicians may participate in either the NIH Interinstitute Endocrine or the NIH Interinstitute Medical Genetics Training Programs. Current research interests of the staff with positions available include:

- The laboratory uses a combination of biochemical and genetic approaches to study 1) the membrane insertion, assembly and trafficking of integral membrane proteins in eukaryotic cells and bacteria and 2) the secretion of eukaryotic proteins that lack conventional signal sequences (e.g., IL-1, galectin). (Harris Bernstein)
- The laboratory studies the biochemistry and molecular biology of homologous recombination in eukaryotes and prokaryotes. Current interests include meiosis in mouse and man, the control of the expression pattern of DNA damage inducible genes, helicases in mammalian recombination, the structure of recombination proteins and novel approaches to gene therapy (including the use of small molecules that promote gene targeting and silencing, such as miniRecAs). (Dan Camerini-Otero)
- The focus is on molecular mechanisms of homologous recombination and DNA mismatch repair including structure-function studies of MutS- and MutL-related proteins, the regulation of recombination by mismatch repair, identification of novel eukaryotic repair and recombination proteins and the modulation of chromatin structure during recombination. (Peggy Hsieh)
- The laboratory studies the molecular mechanisms of orphan nuclear transcription factors. Molecular investigations include: transgenic and gene targeted mouse models, yeast 2-hybrid screening and gene expression profiling. Applicants should have a strong background in molecular and cell biology and must have less than five years of postdoctoral experience. (Vera Nikodem)
- The lab examines mechanisms of RNA processing using genetic and biochemical methods. Cis-acting elements and trans-acting factors required for pre-rRNA processing are being studied in various eucaryotic systems. We have recently identified cis-sequences essential for rRNA processing in yeast and are characterizing proteins comprising the U8 snoRNP in vertebrates. Examination of RNA:RNA and RNA:protein interactions during pre-rRNA processing will provide insight into this basic cellular process. (Brenda Peculis)

Interested candidates should send a letter stating their interests, their curriculum vitae and list of publications, and arrange to have letters from three references sent to one of the investigators above or to Dr. R. Daniel Camerini-Otero, Chief, Genetics and Biochemistry Branch at:

Genetics and Biochemistry Branch
Building 10, Room 9D-20
National Institutes of Health
Bethesda, Maryland 20892

ANNOUNCEMENTS

NATIONAL SPACE BIOMEDICAL RESEARCH INSTITUTE

Special Announcement to Institutions

The National Space Biomedical Research Institute (NSBRI) announces an opportunity to participate in the core research program of the NSBRI. The release date for this announcement is December 28, 1999.

NSBRI Announcement 99-02
An Opportunity to Participate in the Core Research
Program of the National Space Biomedical Research
Institute: Formation of New Research Teams

This announcement is available electronically via the Internet at <http://www.nsbri.org>

Letter of Intent Due: March 17, 2000
Proposals Due: May 5, 2000

Paper copies of this Announcement are available to those who do not have access to the Internet by calling 713-798-7412 or by writing to:

R. J. White, NSBRI
One Baylor Plaza
NA-425
Houston, TX 77030

NATIONAL INSTITUTE ON DEAFNESS AND OTHER COMMUNICATION DISORDERS

TENURE-TRACK POSITION

The Division of Intramural Research, National Institute on Deafness and Other Communication Disorders (NIDCD), is seeking a tenure-track scientist to establish an independent research program in the genetics of deafness and other communication disorders and related syndromes. Understanding the molecular bases of genetic disorders of both humans and animal models will be a primary goal of the program. The successful candidate will join a dynamic group of basic and clinical scientists in a growing intramural institute and will have a joint position in the Laboratory of Molecular Genetics and the Neuro-Otology Branch. The NIDCD offers an excellent working environment including well-equipped research laboratories and numerous opportunities for collaboration. Candidates for this position must have a M.D. or M.D./Ph.D., formal post-doctoral experience, and outstanding publications in peer-reviewed journals. U.S. citizenship or permanent residency, physician's license and board certification in otolaryngology is required. Salary is commensurate with education and experience. **Applications must be postmarked by March 31, 2000. Please submit a curriculum vitae including bibliography, three reprints of recent relevant publications, statement of research interests, an outline of your proposed research, and three letters of reference to:**

Gayle Mundell, NIDCD Personnel Office
31 Center Drive, Building 31, Room 3C11, MSC 2320
Bethesda, MD 20892-2320
301-402-0508 (voice), 301-402-1562 (TTY)

NIH is an Equal Opportunity Employer

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION

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 research, using human subjects. The successful candidate will be expected to develop an externally funded research program and contribute to educational and service activities of the Department. The Department of Psychiatry and Human Behavior has a well-established research environment composed of numerous basic and clinical faculty engaged in research activities designed to build bridges between cellular/biochemical events and behavior. The individual selected for this position will have the opportunity to develop basic/clinical collaborations in a very active and highly competitive research environment. 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.*

ASSISTANT PROFESSOR: TWO POSITIONS OHIO NORTHERN UNIVERSITY

The Department of Biological Sciences seeks two persons to fill the following tenure-track or visiting faculty positions. The positions are for nine months, beginning August 29, 2000; require a Ph.D.; and evidence of effective teaching.

(1) Invertebrate Zoologist. Teaching will include invertebrate zoology, parasitology, and introductory courses.

(2) Human and Cellular Physiologist. Teaching will include a section of third-year medical physiology, cell biology, and topics in cell biology, as well as introductory courses.

Candidates are expected to develop a research program involving undergraduate students.

Letter of application, including teaching philosophy, a curriculum vitae, official transcripts, and three letters of recommendation are required. Student and peer evaluations are acceptable evidence of teaching effectiveness. Applicant files are to be completed by March 15, 2000, for full consideration. Materials should be sent to: **Terry Keiser, Chair, Department of Biological Science, Ohio Northern University, Ada, OH 45810**. Applications will be received until the position is filled. Information about ONU can be found at **website: www.onu.edu**.

ONU is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

FACULTY POSITION IN PHARMACOLOGY

Tenure-track position for a Ph.D. or equivalent, with research interests in immunopharmacology or pharmacogenetics. Especially strong candidates with research interests in other areas will also be considered. Candidates will be expected to establish a strong independent research program, but there are significant opportunities for collaboration with well-funded investigators in multidisciplinary programs. Applicants must have postdoctoral experience, along with a proven record of innovative research and a commitment to the teaching of medical students and graduate students. Please send résumé and a list of references to: **D. E. McMillan, Professor and Chairman, Department of Pharmacology and Toxicology, College of Medicine, Slot 611, 4301 West Markham Street, Little Rock, AR 72205**.

POSITIONS OPEN



MACROMOLECULAR CRYSTALLOGRAPHY

The Medical University of South Carolina has identified structural biology, with an initial emphasis on X-ray crystallography, as a top priority for research development. Applications are invited from structural biologists to develop essential technology platforms and research applications to investigate the structure of biological macromolecules, using X-ray crystallography. Tenure-track appointments will be made at the **ASSISTANT, ASSOCIATE** and/or **PROFESSOR** levels. The University offers a research environment rich in senior-level scientific experience, a strong tradition of interdisciplinary research in biological sciences, excellent laboratory facilities, and a record of highly successful and continuing peer-reviewed research funding (five-year growth from \$66 million to \$103 million currently). Areas of current research strength related to macromolecular investigation include signal transduction, molecular genetics, and enzymology. Applicants must have a Doctorate degree, evidence of scientific productivity and scholarly achievement in X-ray crystallography, and an interest in teaching. The successful candidates at senior levels will have a well-established, peer review-funded research program and proven ability to lead and participate in teams in a highly collaborative environment. Send curriculum vitae, a brief description of research and teaching interests, and the names and e-mail addresses of three references to: **Crystallography Search Committee, Department of Biochemistry and Molecular Biology, Medical University of South Carolina, Charleston, SC 29425**. *The Medical University of South Carolina is an Affirmative Action/Equal Opportunity Employer.*

MICROARRAY FACILITY DIRECTOR UNIVERSITY OF PENNSYLVANIA

The Department of Pathology and Laboratory Medicine, in conjunction with the University of Pennsylvania Cancer Center, invites applications for the Director of a newly organized microarray facility. As a core laboratory of the University of Pennsylvania Cancer Center, this facility will provide a centralized resource for the application of both high-density and low-density microarray screening strategies to a wide variety of research programs in the University of Pennsylvania Cancer Center. The microarray facility Director will be responsible for the organization, staffing, and operation of the microarray facility and will work closely with the researchers on campus to design, execute, and interpret a variety of experiments utilizing the expanding microarray technology. The details of this position are sufficiently flexible to accommodate a range of research activities in addition to the direction of this core facility. Depending on the qualifications and experience of the candidate, a faculty position (tenure- or research-track) or a nonfaculty technical/administrative position will be considered.

The requirements for the position are a Ph.D., M.D., or other appropriate Doctoral degree; a strong background in molecular biology; and familiarity with microarray technology. Applicants should send a curriculum vitae, a summary of research background and interests, and the names and contact information of three professional references to:

**Chair, Microarray Search Committee
c/o Ms. Carolyn Stout**

**Department of Pathology and Laboratory Medicine
University of Pennsylvania Medical Center
3400 Spruce Street, 6 Gates Pavilion
Philadelphia, PA 19104-4283
FAX: 215-662-4063**

E-mail: crstout@mail.med.upenn.edu

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

POSITIONS OPEN

ENDOWED CHAIR IN NEUROSCIENCE MICHIGAN STATE UNIVERSITY

The Neuroscience Program at Michigan State University is expanding research programs focused on neural plasticity and development. The Program invites applications for a tenured appointment at the **FULL PROFESSOR** level to hold the endowed **Barnett Rosenberg Chair in Neuroscience**, which provides substantial recurring research support. Applications are welcome in any area of neural plasticity, but individuals with research interests in neural development are especially encouraged to apply. The ideal candidate will have an established track record of research excellence and funding, interest in developing collaborative interactions within the interdepartmental Neuroscience Program, and a strong desire to participate in graduate education and research training. The appointee will work with current faculty and administration to expand in neural plasticity and development and will play an influential role in hiring additional neuroscience faculty. Departmental affiliation will be appropriate to the expertise of the appointee. Information about the Neuroscience Program and links to relevant departments can be found at **website: <http://www.ns.msu.edu/neurosci>**. To ensure consideration, applicants should submit by April 15, 2000, a letter describing research and teaching interests; a curriculum vitae; representative publications; and the names of three individuals who will provide letters of recommendation upon request to: **Dr. Cheryl Sisk, Director, Neuroscience Program, Michigan State University, East Lansing, MI 48824**. *MSU is an Affirmative Action/Equal Opportunity Institution. Persons with disabilities have the right to request and receive reasonable accommodation. Applications from women and minorities are encouraged.*

MEDICAL HISTOLOGY. The Department of Biomedical Sciences, Ohio University College of Osteopathic Medicine, invites applications for a full-time, tenure-track **ASSISTANT PROFESSOR**. The primary teaching responsibility is to participate in team-taught microscopic anatomy for medical students. Starting date is September 2000. A Ph.D. or equivalent and postdoctoral research training are required. The research area is open, but quality research and teaching are required for tenure and promotion.

Ohio University has 19,000 students, which includes 2,000 graduate and 400 medical students. The University is in a rural setting in the foothills of the Appalachian Mountains, and the 24-year-old College of Osteopathic Medicine is integrated into the University in both teaching and research. The 33 faculty members of the department also direct graduate (M.S. and Ph.D.) students in the Department of Biological Sciences.

Review of applications will begin on February 28, 2000; the search will remain open until the position is filled. Please submit a letter of application, curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: **Jamie Remy, 304 Grosvenor Hall, College of Osteopathic Medicine, Ohio University, Athens, OH 45701-2979**. Further information about the position can be obtained from **Robert Hikida; e-mail: hikida@ohiou.edu**. *Ohio University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR IN BIOLOGY: Augusta State University invites applications for a tenure-track position beginning August 2000. Applicants must possess a Ph.D., a strong commitment to teaching undergraduates, and have the ability to teach anatomy and physiology and cell biology. Additional responsibilities include academic advising and supervision of undergraduate research. Send letter of application stating teaching philosophy; curriculum vitae; and names, addresses, and telephone numbers of three references to: **Dr. Dianne Synder, Department of Biology, Augusta State University, Augusta, GA 30904-2200**. Applications received by March 1, 2000, will be given full consideration. *Augusta State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

MEETINGS

Cancer Genetics & Tumor Suppressor Genes August 16 - 20, 2000



Organized by:

Douglas Hanahan (UCSF)
David Livingston (DFCI)
Scott Lowe (CSHL)
Bruce Ponder (Cambridge U.)
Carol Prives (Columbia U.)
Terri Grodzicker (CSHL)

Keynote Speaker:

Arnold Levine,
The Rockefeller University

Topics:

- Cancer Genetics
- Animal Models
- Control of Cell Cycle & Growth
 - Transcription
 - Apoptosis
- DNA Repair & Cancer Etiology
 - Tumor Progression Models
 - Tumor Suppressors & Oncogenes as Targets for Cancer Therapy
 - Telomerase & Cellular Senescence

Session Chairs

Anton Berns, Joan Brugge,
Titia de Lange, Gerard Evan,
Rick Fishel, Ed Harlow,
David Housman, Tyler Jacks,
Moshe Oren, Charles Sherr,
Louise Strong,
George Vande Woude

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

Abstract Deadline: May 24

**Check out our 2000
meetings & courses
on the web!**

Cold Spring Harbor Laboratory

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

Director Computational Biology and Bioinformatics The University of Pittsburgh, School of Medicine

The University of Pittsburgh, School of Medicine is developing a new Program in Computational Biology and Bioinformatics that will both integrate the diverse activities in these areas that are ongoing across the University and build additional expertise and capacity in computational solutions to key biological questions. This Program builds on major new investments in genome sciences and structural biology across the six schools of the Health Sciences and takes advantage of strong collaborations between the School of Medicine and the Faculty of Arts and Sciences. The Pittsburgh Supercomputing Center is a key resource, in terms of both faculty and support services, for the Program.

Director, Program in Computational Biology and Bioinformatics: An accomplished professional is being sought for the position of Director, Program in Computational Biology/Bioinformatics. It is anticipated that this tenurable position will be filled at the Associate or Full Professor rank, with a primary appointment in the Department of Molecular Genetics and Biochemistry, or in one of the other basic science departments of the School of Medicine, as appropriate. The successful candidate will have a doctoral degree (M.D. or Ph.D.) with extensive training and experience in computational science and in biochemistry, genetics, structural biology, neuroscience, or related fields. Postdoctoral experience in computational methodologies applied to biological/biomedical problems is essential.

The Director is expected to build on existing resources to advance the establishment of the University as a center of excellence in computational biology and bioinformatics, working within the framework of the six schools of the Health Sciences (School of Medicine, School of Dental Medicine, Graduate School of Public Health, School of Pharmacy, School of Nursing, School of Health and Rehabilitation Sciences) but with outreach to other schools on the main campus of the University of Pittsburgh. In this context, computational biology is the application of computational methodologies in support of understanding complex biological systems; computational biology includes, but is not restricted to, aspects of genomics and proteomics; of combinatorial chemistry and biology; of functional imaging; of structural biology; of neurobiology. Bioinformatics is focused on both methodological development and methodological application for extraction and analysis of data from very large and complex data sets. The Director is expected to provide leadership for the Program by building on his/her own active research program to establish a nucleation point for research activities across the schools of the Health Sciences in computational biology; to develop a broad research agenda for the Program that capitalizes on the extensive basic and clinical research programs at the University; to establish a reliable, state-of-the-art set of computational biology and bioinformatics "core services" in support of biomedical research, including but not restricted to molecular, genome, and protein database services. Establishment of graduate and postgraduate training programs in computational biology and bioinformatics will be a key aspect of the Program.

Additional Positions: Two additional tenure track positions in computational biology or bioinformatics will be available, with each recruitment expected to be at the assistant professor level with primary appointment in an appropriate basic science department. Specific recruitment for these positions will be deferred until a Director has been selected, but successful candidates will be expected to develop their individual research programs while contributing to the synergistic efforts of the comprehensive Program. Additionally, three staff positions will be made available to support the service component of the Program, as will be a secretary to support the Director and the overall Program.

Support: The Senior Vice Chancellor, Health Sciences has committed to providing initial support for three years for the establishment of the Program, including the additional positions noted above. Support for the program in years beyond that period will come from grants and fee-for-service activities, with necessary additional subsidies coming from the Senior Vice Chancellor. Thus, the Director will be expected to seek significant external funding to maintain and expand the research activities and the research personnel as the Program develops.

If you are interested in this position, please send your curriculum vitae, a brief statement of your research interests, the names and contact information for at least three references, and reprints of three selected papers to: **Dr. Michelle S. Broido, Assistant Vice Chancellor for Research, Health Sciences, 3471 Fifth Avenue, Suite 201, Pittsburgh, PA 15213.** Nominations for this position are also welcome. All application/nomination material must be received by March 17, 2000.

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

POSITIONS OPEN

The Department of Biology invites applications for three tenure-track positions. Successful candidates are expected to contribute to both undergraduate and graduate training programs in the Department and maintain a high level of research productivity. Ph.D. required. Applicants should submit a curriculum vitae, statements of research and teaching interests, and recent reprints to: **Contact Person (see below), Department of Biology, University of Louisville, Louisville, KY 40292.**

AQUATIC ECOLOGIST: ASSOCIATE/FULL PROFESSOR. Prospective applicants should demonstrate the ability to address important questions in the field as evidenced by a consistent record of publication in top journals and funding from competitive agencies. The research focus is interpreted broadly to include population, community, ecosystem, and landscape ecologists whose interests focus on aquatic systems or interactions between aquatic and terrestrial systems. Areas of expertise may include microbial ecology, large river ecosystems, or watershed processes, as these complement developing strengths within the Department. Contact person: **Dr. Paul Bukaveckas.**

BACTERIOLOGIST: ASSOCIATE/FULL PROFESSOR. The successful candidate is expected to have an excellent record of extramurally funded research productivity, as well as other professional activities. The use of physiological, molecular genetic, or molecular evolutionary approaches in any area of bacteriology will be considered. The current research addresses the molecular evolution of genes involved in nitrification, resistance to antibiotics and oxidative stress, bioremediation, and the molecular characterization of plant-microbe interactions. Contact person: **Dr. Martin Klotz.**

NEUROBIOLOGIST: ASSISTANT PROFESSOR. The department is particularly interested in individuals utilizing molecular, cellular, or physiological approaches to the study of neurobiology, with an emphasis on development and/or environmental effects. Successful applicants will be expected to demonstrate strong research activity, evidence or promise of extramural funding, and teaching experience. Generous start-up funds are available, as well as a recently renovated laboratory. Contact person: **Dr. Joseph Steffen** (please include contact information for three references).

Review of applications will begin immediately and will continue until the positions are filled. Additional information and application procedures for all three positions are available at **website: www.louisville.edu/a-s/biology.** The University of Louisville is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW UNIVERSITY OF COLORADO Health Sciences Center

Position available to join well-funded laboratory of eight investigators to study the (1) regulation of apoptosis in prostate cancer by the TRAIL protein, or (2) control of apoptosis and the cell cycle during hematopoietic transformation by the Pim oncogene, or (3) the regulation of differentiation of human promyelocytic leukemia cells by phorbol esters. Yeast and ES cell technologies are available. Ph.D. required, with a strong background in molecular/cellular biology. Excellent salary consistent with training. Application deadline is February 29, 2000. Send curriculum vitae and names and telephone numbers of three references to: **Andrew S. Kraft, M.D., Chief, Division of Medical Oncology, UCHSC, 4200 East Ninth Avenue, Denver, CO 80262.** The University of Colorado is an Equal Employment Opportunity Commission Employer.

DEAN, SCHOOL OF SCIENCE AND HEALTH. Utah Valley State College, enrolling more than 20,000 students, is a public, state-owned, open-enrollment institution that offers baccalaureate, associate, and technical programs. Screening begins February 11, 2000. Additional information available through: **Human Resources Office; website: www.uvsc.edu.**

POSITIONS OPEN



Medtronic

Medtronic, Inc., the world's leading medical technology company providing lifelong solutions to people with chronic disease, has a challenging opportunity for a **SENIOR SCIENTIST** in Minnesota.

Responsibilities: initiation, design, development, and implementation of scientific research projects. Independent research and development in areas related to commercialization of diagnostic and therapeutic monitoring technology.

Requirements: Ph.D. or M.S., with seven to 10 years of experience in biochemistry, physiology, medicine, molecular biology, clinical chemistry, or other life sciences; laboratory and/or clinical experience related to blood analysis, hemostasis, coagulation, immunology, or *in vitro* diagnostics; statistical skills; strong communication skills; experience with patents and published papers preferred.

Please send your skills-based, scannable résumé to: **Medtronic, Inc., MEC, Job #16137, P.O. Box 976, Minneapolis, MN 55440-0976.**

FACULTY POSITION IN BIOMATERIALS THE JOHNS HOPKINS UNIVERSITY

The Department of Materials Science and Engineering at the Johns Hopkins University invites applications for a faculty position in biomaterials. Specific areas of interest include: materials for use in tissue engineering; biotechnology of materials; materials in therapies for human diseases; and materials processing, characterization, and engineering at the interface between devices and biological systems. The successful candidate will be expected to develop an innovative research program and teach at both the undergraduate and graduate level. Applicants should have a Ph.D. in materials science and engineering or related field and must have demonstrated ability to undertake interdisciplinary research. Postdoctoral experience is highly desirable. It is anticipated that the appointment will be at the **ASSISTANT PROFESSOR** level, although an appointment at the **ASSOCIATE** or **FULL PROFESSOR** level will be considered. Applicants should submit a detailed résumé; a statement of research plans; teaching interests; and the names, addresses (including e-mail), and telephone numbers of three references to: **Biomaterials Search Committee, Department of Materials Science and Engineering, 102 Maryland Hall, The Johns Hopkins University, Baltimore, MD 21218.** To ensure full consideration, applications should be received by March 1, 2000.

Johns Hopkins University is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR WELLMAN LABORATORIES OF PHOTOMEDICINE Massachusetts General Hospital Harvard Medical School

The Wellman Laboratories of Photomedicine is seeking a faculty member with outstanding potential and a demonstrated record of accomplishment in basic or transitional research to complement its ongoing research programs. Research in the 100-member Wellman Laboratories focuses on understanding the interaction of ultraviolet, visible, and infrared radiation with cells and tissue and developing diagnostic and therapeutic applications. Current programs are in cutaneous photobiology, photodynamic therapy, laser-based therapeutics, and *in vivo* diagnostic imaging. Participation in collaborative research projects and maintenance of an independent, externally funded research project are expected.

Send curriculum vitae, description of research interests, and addresses of three references to: **Dr. John A. Parrish, Director, Wellman Laboratories of Photomedicine, Massachusetts General Hospital, WEL-224, Boston, MA 02114.** Massachusetts General Hospital is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF PITTSBURGH DEAN, GRADUATE SCHOOL OF PUBLIC HEALTH

The University of Pittsburgh is seeking applications and nominations of outstanding scholars for the position of Dean of the Graduate School of Public Health (GSPH). The School is one of the six schools of the Health Sciences at the University.

The Dean is the chief academic and administrative officer of the Graduate School of Public Health and reports to the Senior Vice Chancellor for Health Sciences and to the Provost of the University. The Dean must be able to foster extensive collaborations at all levels: within departments; between departments; between GSPH and other schools of the health sciences; other units of the University of Pittsburgh; the UPMC Health System (one of the largest and most respected academic medical centers in the nation); other universities around the world; regional, state, and federal agencies; and especially within the community.

The successful candidate must have broad administrative experience; proven leadership; documented excellence in research; a track record of external funding; and the ability to deal creatively and effectively with the academic, organizational, financial, and managerial responsibilities of the office. The Dean is responsible for the development and leadership of all academic programs, as well as for fostering productive relationships with faculty, students, staff, donors, alumni, and other constituencies. Requirements include a Doctoral degree in a discipline related to public health, eligibility for appointment as a tenured **FULL PROFESSOR**, evidence of sound scholarship, and demonstrated success in health sciences administration. An understanding of the many changes currently affecting public health and our health care system is essential.

Letters of application should include a statement of interest; complete curriculum vitae; and preferably the names, addresses, and telephone numbers of five references. Review of applications will begin immediately and continue until the position is filled. If there is interest in the position, we recommend a response within 60 to 90 days. Nominations, requests for information, and applications should be directed to: **Loren H. Roth, M.D., M.P.H., University of Pittsburgh, Graduate School of Public Health, Dean Search Committee, UPMC Health System, 200 Lothrop Street, Suite 11016, Forbes Tower, Pittsburgh, PA 15213.**

The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and proudly pluralistic. Women and members of minority groups are encouraged to apply. The University offers an excellent salary, benefit, and retirement package.

POSTDOCTORAL POSITION available immediately to study the mechanism whereby atypical protein kinase C regulates NF- κ B and its relation to neuronal survival and differentiation signaling. Experience in cell and molecular biology is preferred. Send letter of intent, curriculum vitae, and names and telephone numbers of references to: **Dr. Marie Wooten, Department of Biological Sciences, 331 Funchess Hall, Auburn University, Auburn, AL 36849. E-mail: mwwooten@ag.auburn.edu.** Review of applications will begin February 14, 2000, and continue until a candidate is recommended for appointment. Affirmative Action/Equal Employment Opportunity. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION immediately available to develop molecular and genetic tools to study protein and lipid trafficking in *Plasmodium*-infected red cells and epithelial cells infected with *Salmonella*. Strong background in molecular biology is essential. Familiarity with cell biology of microbial infections is desirable. Send letter, curriculum vitae, and three references to: **Dr. Kasturi Haldar, Departments of Pathology and Microbiology/Immunology, Ward Building, Third Floor, Room 220, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008. E-mail: k-haldar@nwu.edu.**

ASSISTANT, ASSOCIATE OR FULL-PROFESSORS

UMDNJ - Robert Wood Johnson Medical School

The Department of Pathology & Laboratory Medicine invites applications for four (4) full-time tenure-track/tenured faculty positions. The goal is to create an interactive group of independent investigators working in research areas broadly relating to extracellular matrix, receptors, cytoskeleton, and signaling and their relationships to neural, muscular, neoplastic and other disease processes. Disciplines of interest include molecular cell biology, biochemistry/biophysics, vertebrate/invertebrate developmental biology, and genetics.

Primary responsibilities will be the development of strong individual research programs, with the expectation that faculty will contribute effectively to the teaching of graduate and/or medical students. Start-up funds and dedicated laboratory research space will be provided. These laboratories are in the research division of the Department, located on the Piscataway Campus of the Robert Wood Johnson Medical School and Rutgers University.

Appointment requires a Ph.D., M.D., or M.D./Ph.D. degree, postdoctoral experience, and evidence of outstanding research potential and, for the more senior applicants, evidence of outstanding academic achievement. Applicants should provide a curriculum vitae, brief description of research plans, reprints of recent papers, and names of three or more individuals who would provide letters of recommendation to be sent to: **Dr. Peter D. Yurchenco, Department of Pathology & Laboratory Medicine, UMDNJ-Robert Wood Johnson Medical School, Medical Education**

Building - Room 212, One Robert Wood Johnson Place, New Brunswick, NJ 08903. UMDNJ is an Affirmative Action/Equal Opportunity Employer, M/F/D/V, and a member of the University Health System of New Jersey. Visit our website at: <http://www.umdj.edu>



POSTDOCTORAL POSITIONS

Department of Biology, Washington University in St. Louis

Postdoctoral Positions are available to study cell & developmental biology, plant biology and gene regulation.

Ian Duncan: (1) Regulation and evolution of the *Drosophila* antennal determinant *spineless*; (2) Patterning of adult abdominal segments in *Drosophila*.

Sarah C.R. Elgin: (1) Euchromatic/heterochromatic domains in *Drosophila*; (2) Gene silencing by heterochromatin formation; (3) Role of GAGA factor in gene activation.

Tuan-Hua David Ho: (1) Hormone signal transduction in plants; (2) Function of stress proteins in plants.

Robert Kranz: Gene regulation and extracellular protein assembly in bacteria and plants

Kathryn G. Miller: The actin cytoskeleton in patterning and morphogenesis in *Drosophila*. Myosin VI-catalyzed transport and in vivo function; actin capping protein role in actin structure formation and positioning.

Craig S. Pikaard: (1) Mechanisms of uniparental gene silencing in nucleolar dominance; (2) Molecular and immunological dissection of a purified RNA polymerase holoenzyme capable of transcription, cell signaling and chromatin modification.

Craig S. Pikaard and Eric Richards: Chromatin-level control of gene expression in plants.

Ralph S. Quatrano: Studies on: (1) Gene expression during plant embryogenesis; (2) The role of the cytoskeleton and extracellular matrix in establishing cellular polarity.

Eric Richards: Definition of the molecular determinants of centromere function in *Arabidopsis*.

HOW TO APPLY: The Department's Website contains information about the faculty (<http://www.biology.wustl.edu/faculty.html>) and their research and more detail about these positions (<http://www.biology.wustl.edu/postdocpositions.html>). Candidates are encouraged to apply by submitting a resume to the e-mail address of the appropriate faculty member. Candidates who choose to apply by mail or fax may forward a detailed resume and cover letter to the following address: Chairman, Department of Biology, Washington University, Campus Box 1137, St. Louis, MO 63130-4899. FAX 314-935-8692. *Affirmative Action/Equal Opportunity Employer.*

LOVELACE RESPIRATORY RESEARCH INSTITUTE POSTDOCTORAL POSITIONS AVAILABLE

Lovelace Respiratory Research Institute is committed to the cure of respiratory diseases through research aimed at understanding their causes and biological mechanisms, eliminating exposures to causal agents, and developing improved treatments. Based on its diverse research capabilities, its close working relationships with universities and national laboratories, and its endowed and sponsored research programs, LRRI is one of the nation's largest independent, non-profit biomedical research organizations, and the nation's only such organization wholly dedicated to basic research on respiratory health problems.

A postdoctoral position (E7799) with Dr. K. Harrod is available to study the role of the lung epithelium in innate immunity and host defense against viruses and bacteria using transgenic and gene-targeted animal models. Fellows will participate in pulmonary immunology programs with the University of New Mexico Health Sciences Center. A Ph.D. and experience in immunology, biochemistry, or cell biology is required.

A postdoctoral position (E8199) with Dr. M. Sopori is available to study the signal transduction pathways and neuroimmune interactions associated with the immunologic effects of nicotine. A Ph.D. in molecular immunology or related field is required. Familiarity with neurobiology/neuroendocrinology, preferred.

A postdoctoral position (E2399) with Dr. Y. Tesfagzi is available to study the role of cytokines and other inflammatory mediators in modulating expression and signaling of apoptotic regulators in mucous cells of chronic bronchitis and asthmatics. A Ph.D. in biochemistry, cell biology or related field is required. The laboratory applies molecular, immunological, and immunocytochemical methods in rats and transgenic mouse models. Background in immunology, apoptotic signaling, and/or antisense technology is desirable.

Postdoctoral participants receive a competitive stipend, health insurance, and a relocation allowance. Candidates should send a cover letter referencing the job number and a CV to **Human Resources, P.O. Box 5890, Albuquerque, NM 87185. Fax to 505-845-1035. E-mail to www.hrmail@lrri.org.** For more information about LRRI, see the LRRI Web page: www.LRRI.org



Respiratory Research Institute

Equal Opportunity/Affirmative Action Employer M/F



**Postdoctoral Fellowship
Molecular Neuroscience Program
Mayo Medical School
Rochester, Minnesota**

Applicants are sought for a postdoctoral fellowship in the laboratory of Dr. Anthony J. Windebank (www.mayo.edu/research/cellular_neurobiology). The recipient of the fellowship will study the cellular and molecular basis of neuronal death and neuroprotective strategies with direct clinical relevance.

Applicants should hold the M.D. or Ph.D. degree and have a career interest in becoming an independent investigator. Candidates with expertise in molecular biology or biochemistry will be preferred. Please send curriculum vitae, summary of past accomplishments, and the names of three references to:

**Anthony J. Windebank, M.D.
Molecular Neuroscience Program
Mayo Medical School
1501 Guggenheim Building
200 First Street SW
Rochester, MN 55905**

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



SkeleTech, Inc., is a unique, therapeutically-based contract research organization that is focused on providing high value pre-clinical research services to the pharmaceutical and biotechnology industry. The Company has established capabilities and expertise in bone biology and is now expanding its range of services to include central nervous system (CNS) programs. **SkeleTech** is therefore recruiting a

Director, CNS Biology

As **Director of CNS Biology**, you will play a leadership role in developing the Company's capabilities and expertise in nervous system biology and in managing the Company's CNS business unit. As the leader of this group you will have the opportunity to direct senior scientists conducting client-sponsored research programs and will be expected to continue to make significant scientific contributions to the field of CNS research. Qualified individuals will possess a Ph.D. in a relevant scientific discipline and will have documented expertise in CNS biology. The profile of ideal candidates will also reflect strong backgrounds in efficacy models of Alzheimer's and stroke and the relevant evaluation technologies for each of these diseases.

Located in Bothell, Washington, **SkeleTech** is situated in the midst of the beautiful Puget Sound Region of the Pacific Northwest. **SkeleTech** offers a competitive salary and benefits package including equity participation. Qualified candidates should submit their CVs to:

**Human Resources, #0006N
SkeleTech, Inc.
22002 26th Avenue SE, Suite 104
Bothell, Washington 98021
Or email to: jobs@skeletech.com
www.skeletech.com
Equal Opportunity Employer**

POSITIONS OPEN

**ASSISTANT/ASSOCIATE PROFESSOR
BASIC SCIENCE FACULTY POSITION
ILLINOIS COLLEGE OF OPTOMETRY**

The Illinois College of Optometry invites applications for a full-time faculty position at the Assistant/Associate Professor level in the Department of Basic and Health Science with emphasis in one or more of the following biomedical sciences: physiology, immunology, or pathophysiology. This position will be available July 1, 2000. A Ph.D. in the relevant discipline is required. The successful applicant will be charged with enhancing and promoting excellence in teaching, research, and service. Primary teaching responsibilities include human physiology and pathophysiology in the first and second year of the professional optometric curriculum. The candidate will also be expected to maintain a prominent level of scholarly activity. Applicants should possess significant classroom teaching experience, the ability to interact with clinical faculty in the optometric curriculum, and a strong desire to establish an independent research program. Rank and salary will be commensurate with experience. A letter of intent, current curriculum vitae, and the names and addresses of three professional references should be submitted by March 1, 2000, to: **Illinois College of Optometry, 3241 South Michigan Avenue, Chicago, IL 60616. Attention: Human Resources-FAC.**

MEDICAL WRITER

CIG is seeking a full-time Medical Writer to join its team in Dallas, Texas. CIG is a full-service medical education company specializing in the field of oncology. Successful candidates will be responsible for writing manuscripts from original data, reporting highlights from cancer meetings, and editing and rewriting author-submitted manuscripts. A Ph.D. in a biomedical science and experience in medical writing are required. **FAX** résumé and salary requirements to: **214-820-8844; e-mail: julicog@baylordallas.edu.**

POSITIONS OPEN

**DEPARTMENT OF NUTRITION
CASE WESTERN RESERVE UNIVERSITY**

We seek **INSTRUCTORS** (50–60% time) to work with the directors of dietetic internship programs and Master's-level graduate students. The responsibilities include: developing, monitoring, and evaluating student field placements; assistance in the development of curriculum and course syllabus; development and grading of student assignments; and some classroom teaching. The candidate should be an R.D. (registered dietitian) with a M.S. in nutrition who has had hospital and community-based experience and administrative experience with an accredited dietetic internship. Flexible time schedule, excellent writing skills, and strong ability to work with a diversity of people a must. Send letter of interest, detailed curriculum vitae, and the names/addresses of three references to: **Ms. Pam Woodruff, Department Assistant, Department of Nutrition, Case Western Reserve University, Cleveland, OH 44106-4906.** *CWRU is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.*

MEDICAL WRITER/PROJECT EDITOR

Healthcare Communication and Marketing Company in Stamford, Connecticut, is looking for Medical Writers/Project Editors in life sciences. Responsibilities include developing scientific presentations, manuscript editing, author and speaker recruitment, and program development based on ACPE, ACCME, and FDA guidelines. Requirements: B.S./B.A. in life science, journalism, or communications; graduate degree with publications a plus.

COPYEDITOR/PROOFREADER

Thorough knowledge of AMA style; ability to handle multiple projects and work in fast-paced atmosphere.

Please send résumé and cover letter with salary history to: **Human Resources; FAX: 203-602-0124.** *Equal Opportunity Employer.*

POSITIONS OPEN

**FERMENTATION/BIOPROCESSING
LABORATORY MANAGER**

The Center for Biocatalysis and Bioprocessing is seeking an experienced Laboratory Manager to guide, manage, and develop a growing laboratory staff. The staff operates a wide range of shakers, up to 1,000 liter fermentors, downstream processing equipment, and analytical instruments, all within a GLP laboratory environment. Applicants should have the Ph.D. degree in microbiology or a closely related field. Equivalent combinations of education and experience to match with the Ph.D. degree will be considered. The Laboratory Manager will work with senior staff members to assist in planning and executing projects, aid in developing research proposals, analyzing results, and preparing project reports. The Laboratory Manager will be responsible for training and coordinating the staff. Excellent communication skills are important. The University of Iowa offers an attractive annual salary, including excellent health care and fringe benefit packages. Contact: **Beverly Palmer, Administrative Assistant, Center for Biocatalysis and Bioprocessing, University of Iowa, Oakdale Research Park, 2501 Crosspark Road, Iowa City, IA 52242-5000. Telephone: 319-335-4903; FAX: 319-335-4901; e-mail: beverly-palmer@uiowa.edu; website: <http://www.uiowa.edu/~biocat>.** *The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**RESEARCH HEALTH SCIENCE SPECIALIST
PCR/DIAGNOSTICS**

Position is presently available for a candidate with practical experience with PCR and theoretical background in molecular biology to work on a five-year Veterans Administration (VA) Cooperative Study in San Diego. *U.S. citizenship required.* Interested candidates should submit their curriculum vitae and the names of three references to: **Heather Williams by FAX: 858-552-4359; e-mail: heather.williams2@med.va.gov.** *Equal Opportunity Employer.*

THREE TENURE TRACK POSITIONS LABORATORY OF NEUROSCIENCES

A newly reorganized Laboratory of Neurosciences of the National Institute on Aging is recruiting scientists for three tenure-track positions within its intramural program. Applicants must have an established record of scientific accomplishment within the neurobiology of aging or related fields and possess a strong publication record. Preference will be given to applicants with expertise in the following area:

(1) stem cell biology; (2) electrophysiological and/or imaging analyses of synaptic plasticity in brain slice preparations; (3) invertebrate molecular biology focused on identifying genes and cellular mechanisms that either promote or suppress aging and age-related neurodegenerative disorders, but other interests will be considered. These positions are 100% research, include an attractive set-up package and operating budget, and provide a unique and stimulating, interactive research environment that includes laboratories headed by Mark Mattson (Chief), Donald Ingram, Mark Lane, and Nigel Greig. Applicants should send curriculum vitae, bibliography, and 1,000-word overview of a proposed program along with three letters of recommendation to:

**Chair, LNS Tenure Track Search Committee,
Vacancy # NIA 99-40(GRC), c/o Personnel Office,
Box 26 National Institute of Aging, 5600 Nathan
Shock Drive, Baltimore, MD 21224-6823.**

Applications must be postmarked by March 15, 2000.

NIH is an Equal Opportunity Employer

NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE

Job Opportunities

The National Eye Institute Intramural Program at the NIH campus, Bethesda, MD., is seeking highly qualified Postdoctoral Fellows, Research Associates and Staff Scientists in the following areas:

- Molecular Biology
- Cell Biology
- Immunology
- Psychophysics
- Biochemistry

Salaries range from \$27,500 to \$118,400 per annum, based on experience and type of appointment.

NEI offers an extensive benefits package that you may be eligible for, depending on the appointment mechanisms: Health Benefits, Life Insurance, Retirement Benefits, Annual and Sick Leave, Formal Training Program, Recruitment Bonus, Retention Allowance, Relocation Allowance, Loan Repayment Program, and Travel Benefits.

Candidates interested in specific job opportunities at the NEI may visit the NEI web site at <http://www.nei.nih.gov/> listing the most current positions available.

NIH/NEI is an Equal Opportunity Employer

TENURE-TRACK POSITION IN HUMAN NEUROGENETICS

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM LABORATORY OF NEUROGENETICS

The Laboratory of Neurogenetics, NIAAA, NIH, is recruiting an individual interested in creating and directing a research program in human genomics as it relates to normal function and disease variation in the central nervous system. The successful candidate will have a Ph.D. and/or M.D. with experience in directing research and a publication record in molecular biology, genetics and the neurosciences.

The major research opportunity is the identification of functional variants relevant to the inheritance of interindividual variation in behavior and neuropsychological phenotypes. This effort could begin with linkage findings previously obtained through genome scans of large and carefully defined DNA/phenotype datasets, and those DNAs and data would be available to the investigator. A large resource and opportunity for collaboration in sequence variant detection would also be available, as would support in statistical genetics.

Experience in nucleic acid sequence analysis, sequence variant analysis and genomic cloning is a requirement. Experience in functional expression is an asset and excellent communication skills are essential. Responses are due March 10, 2000. Candidates selected for tenure track appointments are eligible for NIH's Loan Repayment Program. See <http://lrp.info.nih.gov> for details and application.

Please send a curriculum vitae, bibliography and the names and addresses of at least three references to:

**David Goldman, M.D., Chief
Laboratory of Neurogenetics, NIAAA
12420 Parklawn Drive
Park Building, Room 451, MSC 8110
Rockville, MD 20852-8110
Fax: (301) 443-8579
E-mail: dgneuro@box-d.nih.gov**

ANNOUNCEMENTS

Staff Scientist/Toxicologist Vacancy National Institutes of Health

National Institute of Environmental Health Sciences
Research Triangle Park, North Carolina

The Toxicology Operations Branch, National Toxicology Program (NTP), is recruiting to fill a non-laboratory position of Toxicologist/Staff Scientist. The staff scientist is expected to have expertise in toxicology or a related discipline. The successful applicant will serve as a study scientist in the General Toxicology Group and will characterize the biological-toxicological effects from exposure to specifically assigned chemicals and/or agents; plan and provide scientific oversight in the conduct of laboratory studies; evaluate and publish results and serve as a resource of expertise regarding the toxicology of the specified chemicals or groups of chemicals assigned.

Minimum qualifications include an M.D., D.V.M. or Ph.D. or equivalent and at least 3 years postdoctoral experience in toxicology or a directly related field. For additional information concerning this position, contact Dr. Rajendra Chhabra at 919-541-3386 chhabra@niehs.nih.gov or fax 919-541-4255. Applications from women and minority groups are particularly encouraged. The initial appointment is for five years and is renewable every five years indefinitely. Salary commensurate with background. Interested parties should submit a curriculum vitae, bibliography, brief statement of research interests, and arrange for three letters of recommendation to be sent by March 17, 2000, to:

**Ms. Julie Manyik
Human Resource Management Branch (HNV 99-49)
National Institute of Environmental Health Sciences
P.O. Box 12233 (MD EC-11)
Research Triangle Park, NC 27709
919-541-3283 FAX: 919-541-3659
E-mail: manyik@niehs.nih.gov**

NIH/NEI is an Equal Opportunity Employer

POSITIONS OPEN



DIRECTOR MEDICAL BIOTECHNOLOGY CENTER UNIVERSITY OF MARYLAND Biotechnology Institute

Applications and nominations are invited for the position of Director, Medical Biotechnology Center (MBC). Founded in 1986, MBC is one of five research centers of the University of Maryland Biotechnology Institute (UMBI) ([website: http://www.umbi.umd.edu](http://www.umbi.umd.edu)), an independent research component of the University System of Maryland (USM). The MBC is located in a newly constructed, state-of-the-art research facility in Baltimore, Maryland. Center faculty include cellular and molecular biologists, engineers, physicists, and chemists who investigate basic and applied problems in medicine. Current faculty address fundamental questions in bioengineering and optical biology, sensing, neurobiology, genetics, cardiovascular diseases, cellular signaling, and protein structure. A research center dedicated to molecular medicine through biotechnology, the goal of MBC is to bring the USM and the state of Maryland to a position of leadership in medical biotechnology.

We seek a visionary and energetic leader with an outstanding record of research and academic accomplishments who will complement ongoing research activities. The technology and economic development mission of UMBI makes candidates whose research is linked to imaginative applications attractive.

The Director is the chief scientific and administrative officer of MBC and is responsible for developing and evaluating MBC's scientific programs; recruiting outstanding faculty; increasing MBC's extramural funding; and fostering strong ties with other UMBI Centers, affiliated programs within the USM (especially the University of Maryland, Baltimore, and the University of Maryland Baltimore County), and with Maryland biotechnology companies.

Candidates must be nationally and/or internationally recognized leaders in biomedical research or medical biotechnology, with a strong record of distinguished scientific achievement appropriate for a tenured position in UMBI in an area relevant to MBC's research interests and demonstrate considerable experience in research administration in an academic setting. The position will be available in late spring 2000 or shortly thereafter.

Application review will begin March 18, 2000, and will continue until a suitable candidate is selected. Applications should consist of a current curriculum vitae, letter of interest, a narrative of important research accomplishments, a statement describing the applicant's vision on research, and the names and addresses of at least three current references. This material should be sent to:

**MBC Director, Search Committee
Medical Biotechnology Center
725 West Lombard Street, Third Floor
Baltimore, MD 21201**

UMBI is an Affirmative Action/Equal Employment Employer. Women, minorities, veterans, and candidates with disabilities are encouraged to apply.

RESEARCH ASSOCIATE POSTDOCTORAL POSITIONS SIGNAL TRANSDUCTION

Several positions are available to study endothelin-induced intracellular signaling pathways, cellular regulation of prostaglandin synthesis, and signaling through adaptor proteins. Requirements include a Ph.D. or M.D. degree and a sound background in biochemistry, cell biology, and molecular biology. Interested candidates should send their curriculum vitae plus names and telephone numbers of three references to: **Andrey Sorokin, Ph.D., Medical College of Wisconsin, CVRC, 8701 Watertown Plank Road, Milwaukee, WI 53226.** E-mail applications can be sent to [e-mail: sorokin@mcw.edu](mailto:sorokin@mcw.edu).

POSITIONS OPEN

PROFESSOR AND CHAIR, PLANT PATHOLOGY DEPARTMENT, UNIVERSITY OF FLORIDA/INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES (IFAS).

The Chair will be responsible for leadership and coordination of research (Florida Agricultural Experimentation Station), teaching (College of Agriculture and Life Science), and extension (Florida Cooperative Extension Service) functions in the Plant Pathology Department and for coordination with Directors of IFAS Research and Education Centers that have plant pathology faculty. Responsibilities will include: program development and coordination; management of fiscal, personnel, and physical resources; faculty recruitment and promotion; liaison with state, federal, and international agencies and professional and private organizations; cooperation with other units within the University; and promotion of funding opportunities. The Chair must work effectively with faculty and administration in program planning and implementation and facilitation of multidisciplinary research, graduate and undergraduate teaching, and extension programs. The Chair must have the necessary skills to recruit and develop faculty and staff that are responsive to the research and educational needs of clientele groups. The Chair will hold a tenured academic faculty appointment in the Plant Pathology Department. Qualifications include: an earned Doctorate in plant pathology or a closely related field; demonstrated leadership abilities; and strong accomplishments in research, teaching, and/or extension. Excellent oral and written communication skills and abilities for positive interaction with people are essential. Individuals who wish to maintain an active research and/or teaching program are encouraged to apply. Applicants should submit by March 27, 2000: (1) a letter of application describing your qualifications and academic and management philosophy; (2) a curriculum vitae, including a brief history of education and professional experience, major grants, awards and honors received, and a complete list of publications and courses taught; (3) copies of transcripts from undergraduate and graduate colleges attended; and (4) names of five individuals from whom you have requested letters of recommendation to be sent to the following address. Submit application materials to: **Dr. Jerry M. Bennett, University of Florida, P.O. Box 110500, Gainesville, FL 32611-0500.** Refer to Position #916000. Additional information regarding this position and the Department can be viewed at [website: http://plantpath.ifas.ufl.edu](http://plantpath.ifas.ufl.edu). *Equal Employment Opportunity/Equal Access/Affirmative Action Employer.*

SENIOR TECHNICIAN CELL CULTURE AND IMMUNOCYTOCHEMISTRY

Neurotrophic Bioscience Inc., a biotechnology company focused on the discovery and development of novel neurotrophic factors for the treatment of neurodegenerative diseases, is seeking to hire a **CHIEF TECHNICIAN** in the Division of Neurobiology. The qualifications for the position are: (1) preferable Ph.D. degree (M.Sc. with substantial experience); (2) minimum five years of laboratory experience in all aspects of cell culture; (3) knowledge of the principles of immunology and immunocytochemistry; (4) knowledge of immunohistochemistry, including the use of a cryostat; (5) practical experience with the microdissection of rat and/or mouse fetal brain; (6) knowledge of microscopy and the use of imaging software; (7) ability to run agarose and SDS-PAGE gels and perform various blots; (8) ability to supervise technicians and manage projects; (9) leadership capability; and (10) experience in neuro area, i.e., astrocytes, glia, colinergic, ventral mesencephalon, and O2A neurons an asset.

The successful candidate will be self-confident, self-reliant, and strongly motivated to succeed. Salary and benefits will depend on qualifications. The position is available immediately and reports to Chief Scientific Officer. Submit your résumé to: **Donna Coulson, Neurotrophic Bioscience Inc., 96 Skyway Avenue, Etobicoke, Ontario M9W 4Y9 Canada. FAX: 416-674-8060; e-mail: donnac@ntbbio.com.**

POSITIONS OPEN



Applications are invited for a Scientist to work on the developmental biology of the pancreas and insulin target tissues. This is a primary appointment in the Department of Medicine, with the possibility of tenure in a basic science department at The University of Western Ontario. The anticipated rank would be at the **ASSISTANT or ASSOCIATE PROFESSOR-SHIP** level with salary and rank commensurate with experience.

The diabetes program is interdisciplinary, involving scientists in the Department of Medicine, Microbiology and Immunology, Physiology, and Paediatrics. The University of Western Ontario has an internationally recognized diabetes research program involving 15 principal investigators and over 50 graduate students, as well as an MRC/Juvenile Diabetes Foundation International Group in Molecular Mechanisms of the Development of Insulinitis and its Regulation in IDDM and an MRC Group in Foetal and Neonatal Health and Development. Current research covers the molecular and cellular basis of Type 1 and Type 2 diabetes, intervention trials for Type 1 diabetes, and novel therapeutics for the management of Type 2 diabetes.

A Ph.D. Scientist or equivalent is being recruited to provide strength in the ongoing studies of pancreas and tissue development and how foetal and neonatal perturbations may provide risk factors for diabetes in later life. The candidates should have demonstrated research capability in the area of mammalian metabolism or developmental biology. The successful candidate will be expected to develop an independent research program working within the existing collaborative environment. Teaching of graduate and undergraduate courses and graduate student supervision will be through a basic science department. The closing date for the applications will be March 31, 2000. Applications with detailed curriculum vitae and addresses of three references should be submitted to:

**David J. Hill, M.D.
Lawson Research Institute
St. Joseph's Health Centre
268 Grosvenor Street
London, ON N6A 4V2 Canada**

Positions are subject to budget approval. *In accordance with Canadian immigration requirements, this advertising is directed to Canadian citizens and permanent residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals, including women, members of visible minorities, aboriginal persons, and persons with disabilities.*

CELL PHYSIOLOGIST. The Biology Department at Grinnell College seeks to fill a one-year sabbatical replacement position beginning August 2000. We seek candidates to teach a non-majors course, laboratories in molecular genetics and cell biology, and an upper-level course in animal physiology or a related specialty area. A Ph.D. is required, and post-doctoral experience is preferred. Excellent facilities and financial support for student-faculty research are available. In their letters of application, candidates should address their interest in undergraduate teaching in a liberal arts environment. Send curriculum vitae, three letters of recommendation, and copies of all transcripts to: **Clark Lindgren, Cell Physiologist Search Committee, Department of Biology, Grinnell College, Grinnell, IA 50112-0806. E-mail: lindgren@grinnell.edu; FAX: 515-269-4285.** To assure full consideration, applications must be complete by March 17, 2000. For further information about Grinnell College, see our [website: www.grinnell.edu](http://www.grinnell.edu). *Grinnell College is an Equal Opportunity/Affirmative Action Employer committed to employing a highly qualified staff, which reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.*

CONFERENCES

Stem Cells

and Pancreatic Development

National Institutes of Health

Bethesda, Maryland

April 10-11, 2000

Chairs

Douglas Melton, Irving Weissman

Speakers (committed)

David Anderson, Margaret Fuller, Helena Edlund, Fred Gage, John Gearhart, Michael Gorman, Thomas Gingeras, Monica Justice, Klaus Kaestner, Seung Kim, Alan Koresky, Diane Mathis, Ole Madsen, Larry Gene Moss, Chris Newgard, G. Christian Overton, Terry Partridge, Danny Pipeleers, M. Alan Permutt, Nora Sarvetnick, Judith Shizuru, Jonathan Slack, Louis Tartaglia, Peter Wellauer, Leonard Zon

Registration Fee: \$65

Sponsored by: NIDDK, ADA, JDFI

For more information contact:

Computer Craft Corporation

Phone: (301) 493-9674

Web: www.ep.niddk.nih.gov/epconferences.htm

IOWA STATE UNIVERSITY

Where you can become your best.

Director, Plant Sciences Institute

Iowa State University, one of the nation's leading land-grant universities, is seeking exceptional candidates for the position of director of its new multimillion dollar comprehensive Plant Sciences Institute. The institute initially consists of eight established interdisciplinary research centers spanning several colleges: (1) Center for Bioinformatics and Biological Statistics; (2) Center for Plant Breeding; (3) Center for Plant Genomics; (4) Center for Designer Crops; (5) Center for Plant Transformation and Gene Expression; (6) Center for Plant Responses to Environmental Stresses; (7) Seed Science Center; (8) Center for Crops Utilization Research. Visit the institute's Web site: www.plantsciences.iastate.edu

The director, who will report to the university provost, will lead and coordinate the operation and growth of the centers and the institute, and will promote collaboration between the institute, industry, other universities, and the State of Iowa. The director will also hold a tenured faculty position as a professor in an academic department related to the plant sciences, and will be expected to conduct research in an area of the plant sciences.

Iowa State is located in Ames, Iowa, a city of 50,000 recognized nationally for its exceptional quality of life. Iowa State is a Carnegie Foundation Research I university and AAU member. The university's 26,000-student population includes over 4,000 graduate students, with a faculty and staff of 6,000. Annual research expenditures approach \$200 million. Over 60 centers and institutes conduct research in specialized areas. For more information about Iowa State, visit our Web site: www.iastate.edu

Candidates are required to have a Ph.D. and an outstanding ongoing record of national stature in research and scholarship in plant science or a related area, strong communication skills, and the ability to work productively with diverse constituencies. Candidates with experience in leadership of a research organization are preferred. Salary will be competitive and commensurate with experience and qualifications.

Nominations, expressions of interest, and letters of application, accompanied by a curriculum vita, should be sent to Dr. R. C. Seagrave, Search Committee Chair, Iowa State University, 107 Beardshear Hall, Ames, IA 50011-2230 (seagrave@iastate.edu; 515-294-0518; fax 515-294-8844). Review of applications will begin on March 1, 2000, and will continue until the position is filled.

Iowa State University is an equal opportunity/affirmative action employer and encourages nominations of, and applications from, women and minority candidates.



Mayo Clinic

Division of Experimental Pathology

Postdoctoral research positions are available to: 1) develop functional assays for BRCA2 missense mutations based on the role of the BRCA2 protein in DNA repair and cell cycle control; 2) characterize a series of candidate oncogenes involved in progression of breast cancer. This will be studied using cell culture and animal models in combination with gene expression analyses.

Applicants should have a Ph.D. with experience in molecular biology, tissue culture, and cell signaling. A highly competitive salary with full benefits is available to motivated candidates. Send a full C.V. with names and addresses of three references to:

Fergus J. Couch, Ph.D.

Division of Experimental Pathology

Guggenheim 1001A

Mayo Clinic

200 First Street SW

Rochester, MN 55905

email: couch.fergus@mayo.edu

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



**St. Jude Children's
Research Hospital**

ALBAC • Danny Thomas, Founder

ASSOCIATE INVESTIGATOR

Cell and Gene Therapy

(Job Code: SCI-1826)

Responsible for the day-to-day management of a vector production facility, you will utilize unique, advanced skills in achieving the highest research goals, develop new experimental procedures, and publish research results. Must be able to initiate and conduct independent experiments with no supervision. Knowledge of a current gene therapy vector system required. Knowledge of multiple vector systems desirable. Ph.D. Degree and five years of postdoctoral experience or equivalent essential.

For more information, please visit our web site. For consideration, send resume, including job code, to: **St. Jude Children's Research Hospital, HR Dept., 332 North Lauderdale, Memphis, TN 38105. Fax: 901-495-3123. E-mail: virgil.holder@stjude.org**

www.stjude.org/hr

An equal opportunity employer, SJCRH screens candidates for a drug-free work environment.

POSITIONS OPEN

The Atmospheric Sciences Research Center (ASRC) of the University at Albany-SUNY invites applications to fill up to three tenure-track (academic or calendar year) **RESEARCH ASSOCIATE/RESEARCH PROFESSOR** positions for candidates with primary research interests among the following areas: remote sensing and/or satellite data analysis/applications, sensor/instrumentation development and the application of photonics/optoelectronic devices for the measurement of atmospheric parameters, aerosol instrumentation/measurement/chemistry, and climate chemistry and the coupling of climate and air quality.

Candidates must hold a Ph.D. in a relevant field of interest and have a demonstrated record of research. The candidate's primary responsibility is to build and sustain a vibrant, externally funded research program. It is expected that the selected candidates will communicate or work effectively across interdisciplinary interfaces, in particular with ASRC existing research programs of monitoring and modeling the environment. Selected candidates also have the option to participate in one or more academic departments (e.g., Earth and Atmospheric Sciences, Chemistry, or Physics) and/or Centers/Institutes (e.g., Center for Advanced Thin-Film Technology, Institute for Fuel Cell Science and Technology) on campus through joint or adjunct appointments. Academic commitments include teaching graduate-level courses and mentoring graduate students.

Applicants should submit a curriculum vitae, list of publications, a statement of research and professional objectives, and three letters of recommendation by March 15, 2000, to: **Search Committee, Atmospheric Sciences Research Center, Center for Environmental Sciences and Technology Management, 251 Fuller Road, Albany, NY 12203.** Salary to be commensurate with qualifications, and the start date is negotiable. *The University at Albany-SUNY is an Equal Opportunity/Affirmative Action Employer.*

EXPERIMENTAL PATHOLOGY MEDICAL UNIVERSITY OF SOUTH CAROLINA

The Department of Pathology and Laboratory Medicine is seeking two faculty members to join its Research Division. Appointments will be at the level of **ASSISTANT PROFESSOR** on a tenure track. The area of research is open but should involve some aspect of experimental pathology. Research interests of current division members include cancer, viral replication and pathogenesis, and the pathobiology of neurosensory systems and aging. Qualifications include a Ph.D. or M.D. degree and demonstration of the ability to develop an independent, extramurally funded research program.

Please forward curriculum vitae and a statement of research interests to:

Janice M. Lage, M.D.
Professor and Chair

**Department of Pathology and Laboratory Medicine
Medical University of South Carolina
165 Ashley Avenue, Suite 309
P.O. Box 250908
Charleston, SC 29425**

The Medical University is an Equal Opportunity Employer.

INVERTEBRATE ZOOLOGIST/ASSISTANT PROFESSOR. Tenure track; Ph.D. required. Start 16 August 2000. The University of South Carolina Aiken is an undergraduate institution with strong emphasis on teaching and research. Teaching duties include introductory biology, zoology, upper-level courses in specialty area, and service courses as assigned. Send letter of application, curriculum vitae, and arrange for three references to be sent to: **Dr. H. G. Hanlin, Chair, Search Committee, Department of Biology and Geology, USCA, Aiken, SC 29801-6309.** Closing date: 4 March 2000. For further information, see website: www.usca.sc.edu/biogeol/. *USCA is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

POSITIONS OPEN



MUSCULOSKELETAL CELL/ MOLECULAR BIOLOGIST

The Department of Orthopaedic Surgery and the Department of Cell Biology and Physiology are jointly recruiting a Junior Scientist to expand basic research in musculoskeletal biology in the scientifically rich environment of the Washington University School of Medicine. Successful candidates will assume a tenure-track position as **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** with a dual appointment in both departments. A resource package includes laboratory space in the Orthopaedic Research Laboratories and financial underwriting commensurate to the position. Successful candidates will be expected to maintain externally funded programs and to contribute to graduate and resident education.

Send curriculum vitae, a one-page summary of research accomplishments and research plans, and the names and addresses of three references to: **Drs. Sandell and Stahl, Co-Chairs, Musculoskeletal Cell Biologist Search Committee:**

**Linda J. Sandell, Ph.D., Director of Research,
Department of Orthopaedic Surgery
Philip D. Stahl, Ph.D., Head, Department of
Cell Biology and Physiology
Washington University School of Medicine
Mail Stop 90-34-674
216 South Kingshighway
St. Louis, MO 63110 U.S.A.**

WUSOM is an Equal Opportunity/Affirmative Action Employer.

LABORATORY MANAGER

Fairfax Identity Laboratories, a division of the Genetics and IVF Institute located in the greater metropolitan Washington, D.C., area, is a rapidly expanding genotyping facility seeking a technically skilled **MOLECULAR BIOLOGIST** with more than three years of management experience. Successful applicant will have experience with a wide variety of instrumentation and the experience and ability to efficiently manage complex work flow issues and staff affecting daily operations. Position requires the ability to maintain quality systems and a team environment. Minimum B.S. in Biology/Life Sciences; postgraduate degree preferred. Send résumé and salary requirements to:

**Fairfax Identity Laboratories
Attention: ACS
3025 Hamaker Court, Suite 203
Fairfax, VA 22031
FAX: 703-204-9125
E-mail: asozer@givf.com**

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

ASSOCIATE DIRECTOR

Northwest Hospital is a growing community hospital located in Seattle, Washington, and is expanding its research base through the department of Molecular Medicine, with new research laboratories available fall 2000 that are capable of supporting the research programs of eight to 10 funded investigators. Further expansion of the program is envisioned for 2002. We seek a senior individual with an established research program in cancer research capable of leading this effort. This position requires excellent management and communication skills, with the ability to help create an environment conducive to interactive research along with the goal to moving bench science into the clinic and biotechnology industry. Highly competitive salary and benefit package available. Please respond with curriculum vitae, a brief description of research program, funding history, and vision of research areas to: **Search Committee, Molecular Medicine, Northwest Hospital, 2203 Airport Way South, Suite 200, Seattle, WA 98134. FAX: 425-608-3009; e-mail: marilyn@nwbio.com.**

POSITIONS OPEN

The Biomedical Engineering Center at The Ohio State University is seeking a total of three faculty members at the **ASSISTANT** (tenure-track) or **ASSOCIATE** levels. Two are in all specialties of the area of biomedical nanotechnology or bio-MEMS, with emphasis in DNA chips, microfluidics, tissue engineering, drug delivery, biomaterials, biomolecular patterning, soft lithography, or carbon nanotubes. The third position is in the area of biomedical imaging, with possible areas of interest to include but not limited to functional MRI, cellular and tissue imaging, instrumentation, and algorithm development. Successful candidates will be expected to develop an independent and extramurally funded research program that may involve clinicians, basic scientists, and other engineers; they will develop and teach undergraduate and graduate courses and advise biomedical engineering students; assist in the planned expansion of current research facilities; and serve on committees in the University. The Biomedical Engineering Center is a joint unit of the College of Engineering and The College of Medicine and Public Health at Ohio State and grants Masters' and Doctoral degrees in biomedical engineering. Approximately 70 students are enrolled in the Center. They are advised by its seven core faculty and more than 60 participating faculty tenured in eight different colleges within the University. Biomedical Engineering has been identified by the Deans of Engineering and Medicine as a key thrust area for their colleges. This announcement marks the beginning of an anticipated substantial and rapid growth phase for the discipline at Ohio State, leading to the formation of a two-college Department of Biomedical Engineering in the near future. Applicants should send résumés and three letters of reference by April 15, 2000, to: **Mauro Ferrari, Director, Biomedical Engineering Center, 270 Bevis Hall, 1080 Carmack Road, Columbus, OH 43210-1002.** *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and individuals with disabilities are encouraged to apply.*

GLOBAL CHANGE/BIOLOGICAL RESOURCES SCIENCE AND POLICY POSITION

National nonprofit organization seeks **MIDCAREER** to **SENIOR SCIENTIST** to help lead analytic, policy, and outreach effort to strengthen the participation of U.S. biologists in shaping public policy on and public understanding of key global change/biological resource issues. Priority areas include slowing the introduction and spread of harmful invasive species and using ecosystem service values to strengthen conservation policies. Applicants should have demonstrable scientific and/or policy expertise in one of these areas, a broad understanding of the scientific and policy aspects of biological resource issues, and a facility for communicating technical information to general audiences. Position requires Ph.D. in relevant discipline, strong project management experience, writing and public speaking skills, and occasional travel. Experience with public outreach and national or regional biological resource policy highly desirable. Competitive salary and benefits. Review of applications begins March 1, 2000. Send cover letter, curriculum vitae, writing sample, and three references to: **Director, Global Resources, Union of Concerned Scientists, 2 Brattle Square, Cambridge, MA 02238-9105.** More information at website: www.ucsusa.org. *UCS is an Equal Opportunity Employer continually seeking to diversify its staff.*

The Section of Cardiovascular Medicine, Department of Internal Medicine at Yale University, seeks two M.D. or M.D./Ph.D. Clinical Scientists as **ASSISTANT PROFESSORS** with specific expertise in myocardial metabolism or vascular biology. Significant research and publication record and independent funding potential required. Interested candidates please send curriculum vitae and three letters of reference to: **Barry L. Zaret, M.D., c/o Kimberly Eigner, Yale University, Section of Cardiovascular Medicine, P.O. Box 208017, New Haven, CT 06520-8017** by March 4, 2000. *Yale is an Affirmative Action/Equal Opportunity Employer. Applications from women and members of minority groups are encouraged.*

POSTDOCTORAL FELLOWSHIP

in Gene Expression and Viral Oncology at the Wistar Institute

Positions are available to study the interaction of Epstein-Barr virus regulatory proteins with cellular transcriptional, replication and cell-cycle machinery. Projects include:

- (1) Mechanism of transcriptional activation of the Epstein-Barr virus latent genome *Genes Dev.* 8: 995; *Nature* 377: 254; *Mol. Cell. Biol.* 17:6624.
- (2) Role of CBP and other histone acetyltransferase (HAT) containing coactivators in viral reactivation. (*Mol. Cell. Biol.* 19:1617).
- (3) Cell cycle control of viral DNA replication by EBNA1 (*Virology* 239:340).

Candidates should have less than two years of post-doctoral experience and have training in either molecular biology, biochemistry, virology or yeast genetics.

Please send CV and the names of three references to The Wistar Institute, Human Resources Department, Attn: Paul Lieberman, Ph.D., 3601 Spruce Street, Philadelphia, PA 19104. EOE/AA/M/F/D/V.



Roche

PCR TECHNOLOGY

GROUP LEADER PCR CONTROLS MANUFACTURING

Roche Molecular Systems, Inc. is a worldwide leader in research, development, and manufacturing of molecular diagnostic reagents. We have an exceptional opportunity for a Group Leader in our Branchburg, New Jersey Manufacturing Operations area for the production and testing of PCR Internal Controls and Quantitation Standards. The position is intended to relocate to our new, state-of-the-art production facility in Pleasanton, California within the next 2-3 years.

This senior production team position will be responsible for the day-to-day scheduling and execution of planned product orders; facilitating the transfer of new products from Research to the manufacturing environment; training staff in production and test methods; process validations; and maintenance of subordinate operations in compliance with cGMPs and company SOPs.

The successful candidate will have a M.S. in Biochemistry, Molecular Biology, or equivalent, with 10-15 years of experience in a diagnostic manufacturing operation; or a Ph.D. with 10+ years experience in a diagnostic manufacturing/biotechnology production area. Expert knowledge of PCR methods (including RT-PCR and instrumentation) and working experience with production control. MRP systems are required. Familiarity with cGMPs, QSRs, and ISO requirements is also essential. Ability to prepare manufacturing documents and coordinate/implement production schedules is necessary. Strong problem-solving and verbal/written communication skills are required. Process scale-up and validation experience is highly desirable.

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

Roche

Roche Molecular Systems Inc.

The Cure Is Out There.

At SUGEN, we foster a creative, energetic and team-oriented atmosphere to develop small molecule drugs using renowned drug discovery techniques. Our continued success has created a great opportunity in our state of the art South San Francisco facility for a motivated leader to direct our drug discovery project teams.

Group Leader Oncology Preclinical Therapeutics

You will manage & oversee the identification/optimization of lead candidates and subsequent IND filings; play a pivotal role in early clinical trial "proof of concept" studies; manage a group of RAs and Scientists; develop novel, target-directed in vitro and in vivo models to determine the mechanism of action of small molecule anti-cancer agents; and identify surrogate markers for evidence of biological activity in preclinical models and their successful translation to clinical trial use. You will also be responsible for directing our angiogenesis programs and diverse drug discovery/development efforts, interacting with other groups such as drug discovery, pharmacokinetics/toxicology, research, clinical, and regulatory, and managing outside collaborations with other companies and academic collaborators. Candidates must possess a solid understanding of the competition; the ability to excel in a fast-paced, deadline-driven environment; and excellent organizational & written/verbal communication skills. A strong publishing record is required. 5-10 years of drug development experience, including experience with FDA filings is desired.

We will reward you with an attractive compensation and benefits package that includes a 1st class pension plan, a generous profit sharing/bonus program, weekly happy hours (TGIF), and a fun, collaborative work environment that encourages creativity and achievement. Please forward resume & cover letter to: SUGEN, Inc. HR Department, Attn: Job Code JCS0370-S, 230 East Grand Avenue, South San Francisco, CA 94080; fax: (650) 553-8301; email: jobs@sugen.com (MS Word docs only, please). EOE



SUGEN

www.sugen.com



POST-DOCTORAL RESEARCH ASSOCIATES

The Blood Center of Southeastern Wisconsin, an internationally recognized leader in vascular biology, molecular hematology, transplantation immunology, and transfusion medicine research, is seeking outstanding candidates to fill NIH-funded Post-doctoral Training Grant positions at its Blood Research Institute (BRI). The BRI provides state-of-the-art facilities, and offers an excellent environment for scientific interaction and interdisciplinary collaboration. Opportunities are available with Blood Center investigators in the following areas:

- John W. Adamson, MD** – Stem cell biology, ex vivo expansion and transplantation; cytokine-induced platelet production.
- Richard H. Aster, MD** – Pathogenesis of immune disorders affecting blood cells.
- David D. Eckels, PhD** – The role of mutation in hepatitis C virus and modulation of the human immune response.
- Jack Gorski, PhD** – Molecular genetic analysis of T cell repertoires.
- Cheryl Hillery, MD** – Mechanisms of vaso-occlusion in sickle cell disease.
- Robert R. Montgomery, MD** – Molecular biology of von Willebrand factor.
- Michael W. Mosesson, MD** – Fibrin formation and its role in angiogenesis; mechanisms of thrombophilia in dysfibrinogenemias.
- Peter J. Newman, PhD** – Cell adhesion and signaling receptors in vascular cells.
- Debra Newton-Nash, PhD** – Protein tyrosine kinase-dependent signal transduction in T cells.
- Gian P. Visentin, MD** – Heparin induced thrombocytopenia; regulation of endothelial cell proliferation and angiogenesis.
- Hartmut Weiler, PhD** – Function of blood coagulation in development.

Because these positions are funded through an NIH Training Grant, only American citizens or permanent residents are eligible to apply. Qualified applicants should send curriculum vitae, a brief description of recent research, and the names and telephone numbers of three references to:

John W. Adamson, M.D.
Director, Blood Research Institute
The Blood Center of Southeastern Wisconsin
P.O. Box 2178
Milwaukee, WI 53201-2178

The Blood Center of Southeastern Wisconsin is an equal opportunity/affirmative action employer. Minorities and women are encouraged to apply.

POSITIONS OPEN

THE UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

The Department of Biochemistry and Molecular Biology invites applications for one or more tenure-track positions at either the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Applicants must have a Ph.D., M.D., or equivalent degree with experience in biochemistry, molecular biology, or a related discipline; relevant postdoctoral experience; an established research record; and must be committed strongly to an academic career in biomedical research and teaching. The department's research encompasses the biochemistry and molecular biology of disease states, with specific interests in regulation of gene expression, functional genomics and proteomics, metabolic and nutritional biochemistry, redox systems, and protein structure and function. Preference will be given to individuals with extramural grant support and whose research activities complement those of the Department and School of Medicine. Salary will be commensurate with experience and qualifications. For best consideration, applicants should submit the following before April 1, 2000: a curriculum vitae, the names of three references, and a concise description of their research program and career goals. The materials should be sent to: **Dr. John Omdahl, Chair, Faculty Search Committee, c/o Ms. Arlene Martinez, Department of Biochemistry and Molecular Biology, University of New Mexico School of Medicine, Albuquerque, NM 87131-5221. Website: hsc.unm.edu/som/bmb/.**

The University of New Mexico is an Affirmative Action/Equal Opportunity Employer/Educator. The Department is committed to diversity within its faculty and students, and members of underrepresented groups are strongly encouraged to apply.

Titan Pharmaceuticals is a biopharmaceutical company developing proprietary therapeutics for the treatment of cancer, CNS disorders, and other serious and life-threatening diseases (**website: www.titanpharm.com**).

Titan has established a broad pipeline of innovative products in development against cancer and CNS diseases, with several products currently in human testing and a number of other products poised to enter clinical testing.

We are currently looking to hire a qualified **SCIENTIST** to join the development and management of preclinical studies. Duties will include the hands-on management of diverse research programs, writing up and presentation of data obtained, and active involvement in writing and submitting grant applications.

Applicants with pre- or postdoctoral training in immunology, neurosciences, and/or pharmaceutical sciences with strong scientific writing skills are encouraged to contact: **M. Nakamura, Titan Pharmaceuticals Inc., 400 Oyster Point Boulevard, Suite 505, South San Francisco, CA 94080. Telephone: 650-244-4990. FAX: 650-244-4956. We are an Equal Opportunity Employer.**

PLANT ECOLOGIST/BOTANIST. The School of Sciences at Lynchburg College in Virginia invites applications for the position of **ASSISTANT/ASSOCIATE PROFESSOR**, three-year renewable; possible conversion to tenure track. Teaching primarily includes plant biology, ecology, and freshman biology. Ph.D. required and teaching experience preferred. Good knowledge of eastern U.S.A. flora is expected, and training in plant molecular/cellular processes is desirable. Please visit **website: www.lynchburg.edu/sciencepositions** for more detailed information. Send letter of application; curriculum vitae; teaching philosophy and experience; research plans; and a list of three references, along with their e-mail and mailing addresses, to: **James E. Carico, Dean, School of Sciences, 1501 Lakeside Drive, Lynchburg, VA 24501 U.S.A.** Review of applications will begin immediately and continue until position is filled. *Lynchburg College is an Equal Opportunity Employer.*

POSITIONS OPEN

MICROSPORE CULTURE AND TRANSFORMATION SPECIALIST who will be responsible for providing expertise in the field of wheat and barley microspore culture and applications, which include: developing a microspore transient assay system to test expression level of newly discovered genes or genetic elements; developing a wheat microspore culture system for production of doubled haploids for plant breeding application; developing wheat and barley microspore culture and transformation system with *Agrobacterium* and/or biolistic bombardment to transfer new genes into wheat for wheat breeding and improvement; performing cytological analysis; acting as technical point person in microspore collaboration projects; providing expertise in the field of wheat immature embryo transformation system, using both *Agrobacterium* transformation and biolistic bombardment; optimization and improvement of transformation system to transfer herbicide-tolerant genes and male-sterile genes into wheat to increase wheat yield; and utilizing principles of principles and applications of plant tissue culture, cytogenetics in plant breeding and laboratory, and advanced crop sciences. Degree requirements include a minimum of a Master's of Science in biotechnology or genetics or plant science, combined with five years of experience in the job offered or five years of experience as a Research Assistant and/or Breeding Researcher. Work experience must have included developing microspore culture systems, cytological analysis, immature embryo cultures, wheat breeding and improvement through the development of a double haploid production system. Coursework must have included: principles and applications of plant tissue culture, cytogenetics in plant breeding and laboratory, and advanced crop sciences. Forty hours per week; 9 a.m. to 5 p.m.; \$58,944 per year. St. Louis location. *Must have proof of legal authority to work permanently in the United States.* Send two copies of both résumé and cover letter to: **Missouri Department of Labor and Industrial Relations, Division of Workforce Development, Attention: Ms. J. Gaston, 4040 Seven Hills Drive, Suite 166, Florissant, MO 63033-6700.** Please include Job Number 199028. No calls. An employer-paid ad.

POSTDOCTORAL POSITION BETH ISRAEL DEACONESS MEDICAL CENTER Harvard Medical School

A Postdoctoral position is available beginning April 2000 to study macrophage phagocytic receptor-mediated signal transduction pathways. These NIH-supported studies focus on macrophage innate immune responses to opportunistic pathogens and examine the impact of HIV-1 infection. Ph.D. applicants with at least two years of postdoctoral experience in macrophage cell and molecular biology and with a published experience or strong interest in HIV virology/cellular immunology and signal transduction pathways are encouraged to apply. Flow cytometry experience is desirable. The Beth Israel Deaconess Medical Center is an outstanding biomedical research center at Harvard Medical School and provides an exceptional training environment for scientific endeavors and career development. Stipends and benefits are highly competitive. Applicants should submit a cover letter indicating research interests and expertise, curriculum vitae, and three letters of reference to: **Henry Koziel, M.D., Division of Pulmonary and Critical Care Medicine, Palmer Building, Room 108, Beth Israel Deaconess Medical Center, 330 Brookline Avenue, Boston, MA 02215. E-mail: hkoziel@caregroup.harvard.edu. BIDMC is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION to investigate electrostatic binding of proteins to membranes: relevance to signal transduction. Contact: **Dr. Stuart McLaughlin, Department of Physiology and Biophysics, HSC, State University of New York (SUNY), Stony Brook, NY 11794-8661. FAX: 631-444-3432; e-mail: smcl@epo.som.sunysb.edu.** *The State University at Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.*

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGY

Developmental Biology/Neurogenesis

The Department of Biology of the College of Staten Island of The City University of New York invites applications for an anticipated tenure-track position in developmental biology/neurogenesis at the Assistant or Associate Professor level, to start September 2000. Required: a Ph.D., college teaching and curriculum development experience, and a record sufficient for appointment to the CUNY doctoral faculty. Postdoctoral experience and grant activity preferred. Responsibilities include undergraduate and graduate teaching, performing department and college service, and engagement in an active and productive research agenda. The successful candidate will participate in a multidisciplinary neuroscience program. Appointment at the Associate Professor level will require external funding. Salary range: Assistant Professor, \$42,162 to \$57,049; Associate Professor, \$46,094 to \$68,174, commensurate with qualifications and experience. Review of applications will begin on March 27, 2000, and continue until the position is filled. Send a letter of application, including research plans and a statement of teaching philosophy; curriculum vitae; and the names, addresses, and telephone numbers of at least three references to: **Professor Jacqueline LeBlanc, Chair, Department of Biology, College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314.** *Equal Employment Opportunity/Affirmative Action/Americans with Disabilities Act Employer.*

CALYX THERAPEUTICS INC.

A growing biopharmaceutical company in the San Francisco Bay area is actively involved in discovery and development of new leads from natural products to treat diabetes, inflammation, and allergic diseases. The company has immediate openings for several **POSTDOCTORAL/SCIENTIST POSITIONS** in the following areas: (1) biochemistry (#RD 2006): Ph.D. in biochemistry with proven experience in intracellular signal transduction in the area of Type II diabetes. Must be creative and independent to solve mechanism of drug action; (2) cell biology (#RD 2007): M.S./Ph.D. with excellent skills in maintaining variety of cell lines, such as CHO cells, mast cells, fibroblasts, etc; (3) immunology (#RD 2008): Ph.D. in immunology to conduct *in vivo* models of RA (CIA, AR) with experience in various *in vitro* cytokine assays, culture of PBMCs, macrophages, and FACS analysis; (4) allergic rhinitis (#RD 2009): Ph.D. in immunology/allergy to initiate *in vivo* models and *in vitro* assays for allergic rhinitis. Experience in mast cell culture and solid understanding of mechanism of allergic rhinitis is essential; (5) animal physiology (#RD 2010): B.S./M.S./Ph.D. in physiology, with experience in handling rats and mice oral gavage, iv, im, ip delivery. Experience in models of diabetes, inflammation, and/or allergy is a plus.

Send résumé with job code to: **Human Resources, Calyx Therapeutics Inc., 3525 Breakwater Avenue, Hayward, CA 94545. FAX: 510-780-1025.**

SCIENTIFIC DIRECTOR INTERNATIONAL RETT SYNDROME ASSOCIATION

The nonprofit International Rett Syndrome Association is seeking a Scientific Director to further research towards the understanding, treatment, and cure of Rett Syndrome. Duties include management of a grant program, developing resources, promoting research on Rett Syndrome, and serving as an interface with parents, researchers, and granting agencies. A Ph.D. and research experience and people and management skills, as well as fluency in English, are desired. More details can be found at the IRSA website: **www.rettssyndrome.org/SciDir/**. Applications should be sent to: **Kathy Hunter, IRSA, 9121 Piscataway Road #2B, Clinton, MD 20735.** Applications received by March 15, 2000, will have first consideration.



Tenure/Tenure Track Scientist Position in Nutritional Epidemiology at NCI

"One intramural tenure / tenure track position is available immediately in the Nutritional Epidemiology Branch (Chief: Arthur Schatzkin, M.D., Dr.P.H.), Division of Cancer Epidemiology and Genetics, National Cancer Institute (NCI), National Institutes of Health (NIH)."

Candidates should have an M.D./D.V.M., a doctorate in epidemiology, or a Ph.D. in nutrition, biochemistry, or related discipline. Candidates must have a record of publications showing the ability to design, conduct, analyze and interpret nutritional epidemiologic studies of cancer or other chronic diseases. We seek individuals with demonstrated ability to collaborate productively and collegially with a wide range of scientists both within and outside NCI.

As part of developing independent, interdisciplinary cancer research programs, successful candidates will initiate new observational or experimental epidemiologic studies in areas such as (a) micro nutrients, macro nutrients, and non-nutritive food constituents; (b) food groups and dietary patterns; (c) dietary assessment, including biomarkers of intake; (d) dietary measurement error; (e) obesity, body size and energy balance; (f) nutrient-gene interactions; and (g) nutritional modulation of intermediate end points in carcinogenesis. Appropriate space and resources will be provided. Competitive salary and benefit packages are available. Interested individuals should send a cover letter, curriculum vitae, brief summary of research interests and experience, copies of selected publications, and three letters of reference to:

Mrs. Judy Schwadron
Division of Cancer Epidemiology and Genetics
National Cancer Institute
Executive Plaza South, Room 8073
Bethesda, MD 20892-7374

**The closing date for applications is April 30th.
The National Institutes of Health is an Equal Opportunity Employer.**

Looking for brilliant career opportunities?



**Then look here...
www.sciencecareers.org**

- Job Search • Job Alerts • Employer Profiles
- Advice and Perspectives
- Meetings and Announcements
- Academic Connections

Science Careers
www.sciencecareers.org

GLOBAL OPPORTUNITIES



Senior Scientists

The National Cancer Centre of Singapore (NCC) is a new state-of-the-art translational research institution dedicated to progress against cancer. We are offering opportunities for experienced scientists and postdocs in the following fields:

- Cancer Cell Signalling and Protein Phosphorylation
- Cell Adhesion and Cancer Metastasis
- Proteomic/DNA Microarray Tissue Analysis
- Molecular Pathology and Tumor Diagnostics
- Cancer Genetics and Bioinformatics
- Clinical Pharmacology and Pharmacogenomics
- Tumor Virology and Immunotherapy
- Hormonal Carcinogenesis

A track record of relevant published work is essential. NCC provides an attractive remuneration and benefits package including Singapore relocation and return expenses, settling-in allowance, conference leave and housing subsidy.

Applicants should email their c.v. to **Richard J. Epstein MD PhD**, at HR-Research@nccs.com.sg, together with a cover message stating the field of interest, a summary of proposed research, and the email addresses of 3 referees.

(All applications will be treated as strictly confidential.)
website: www.nccs.com.sg

POSITIONS OPEN

POSTDOCTORAL POSITIONS THE M.I.N.D. INSTITUTE UNIVERSITY OF CALIFORNIA, DAVIS

The M.I.N.D. (Medical Investigation of Neurodevelopmental Disorders) Institute of University of California, Davis, has postdoctoral positions available in several areas relevant to the understanding of neurodevelopmental disorders. These include: neuroimaging (optimization of structural and functional imaging of the developing human brain; postmortem neuroanatomical analysis of the human brain, particularly in autism); and animal models of neurodevelopmental disorders (neurobiology of primate social behavior; development of primate models of autism). Positions are available immediately. Applicants should send a letter indicating area(s) of research interest, a current curriculum vitae, and three letters of reference to: **Dr. David G. Amaral, Research Director, The M.I.N.D. Institute, 1544 Newton Court, Davis, CA 95616. E-mail: dgaral@ucdavis.edu.** Salary will be commensurate with experience, and positions are expected to be two to three years in duration. *The University of California, Davis, is an Equal Opportunity Employer.*

ENVIRONMENTAL SCIENTIST. The School of Sciences at Lynchburg College in Virginia invites applications for the position of **ASSISTANT/ASSOCIATE PROFESSOR**, tenure track. Teaching involves a variety of courses, including a freshman-level environmental science course and advanced courses such as freshwater ecology, environmental law and policy, and environmental geology. Ph.D. required and teaching experience preferred. Ability to conduct field and laboratory activities with individual students in problem-solving skills and a willingness to expand the College's collaboration with the local environmental community are expected. Please visit website: www.lynchburg.edu/sciencepositions for more detailed information. Send letter of application; curriculum vitae; teaching philosophy and experience; research plans; and a list of three references, along with their e-mail and mailing addresses, to: **James E. Carico, Dean, School of Sciences, 1501 Lakeside Drive, Lynchburg, VA 24501 U.S.A.** Review of applications will begin immediately and continue until position is filled. *Lynchburg College is an Equal Opportunity Employer.*

NIH-supported **POSTDOCTORAL POSITION** is available for molecular biologist to study transcriptional regulation by intracellular FGF receptors using recombinant DNA constructions, protein mutagenesis, plasmid transfections, viral infections, and yeast two-hybrid assay. Send curriculum vitae to: **Dr. Michael K. Stachowiak, Director, Interdisciplinary Graduate Program in Biomedical Neuroscience, School of Medicine, SUNY, 317 Farber Hall, Buffalo, NY 14214-3000. FAX: 716-829-2915; e-mail: mks4@buffalo.edu.**

SCIENTIFIC DIRECTOR

Newly formed Rett Syndrome Research Foundation seeks an energetic and motivated leader to strategize and implement a worldwide research program. Responsibilities: administer peer-review process; plan, develop, and execute program of scientific meetings; liaison to researchers; lobby Congress, NIH, and other research organizations; and represent Foundation in a variety of forums. Requirements: minimum four years of experience administering a scientific program; Ph.D. in science preferred; superior organizational, diplomatic, and communication skills. Must possess strong initiative and ability to work independently; willingness to travel. Competitive salary and benefits. Please send résumés to: **Rett Syndrome Research Foundation, P.O. Box 46387, Cincinnati, OH 45246.**

POSITIONS OPEN



The United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Molecular Plant Pathology Laboratory in Beltsville, Maryland, is seeking applications for a **RESEARCH PLANT PATHOLOGIST/MOLECULAR BIOLOGIST**. As a postdoctoral Research Scientist, the incumbent will investigate the development and use of plant virus-based vectors for expression of foreign genes in plants, especially sugar beet. The research is focused on optimizing gene expression, tissue targeting, and molecular antagonism against pathogens. The research will form the groundwork for development of a plant virus-based vector construct for gene expression in sugar beet.

Candidates must have a Ph.D. in plant pathology, molecular biology, virology, or related field and possess skills in a variety of molecular biological techniques. This is a two-year, full-time position, available immediately. *There are some citizenship restrictions.* Salary is \$40,714 to \$63,436, commensurate with experience, plus benefits (salary is subject to increase January 2000). Contact: **Robert E. Davis; Telephone: 301-504-5745; FAX: 301-504-5449; e-mail: rdavis@ars.arsusda.gov.** Send applications to: **Robert E. Davis, USDA-ARS, Molecular Plant Pathology Laboratory, Room 252, Building 011A, Beltsville, MD 20705.** *USDA is an Equal Opportunity Provider and Employer.*

PHARMACOLOGIST/TOXICOLOGIST

Cortex Pharmaceuticals, Inc., an Irvine-based neuroscience company focused on novel drug therapies for the treatment of neurological and psychiatric disorders, is currently seeking an experienced Pharmacologist/Toxicologist to assist in the ongoing development of its Ampakine® family of compounds.

Responsibilities will include *in vivo* evaluation of new drug entities with regard to pharmacokinetics and metabolism. Knowledge of CNS pharmacology and experience with radio ligand binding would be assets. The successful candidate will possess an M.S./Ph.D. degree from a recognized institution and have five to eight years of work experience.

Cortex Pharmaceuticals, Inc., offers a competitive compensation and benefits package to include company-paid medical, dental, vision, and life insurance; 401(k) retirement plan; and stock options.

Interested applicants should mail a résumé or curriculum vitae by February 15, 2000, to: **Human Resources, Cortex Pharmaceuticals, Inc., 15241 Barranca Parkway, Irvine, CA 92618. FAX: 949-727-3657; e-mail: jmello@cortexpharm.com.** No phone calls, please. See Cortex website: cortexpharm.com. *Cortex Pharmaceuticals, Inc., is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN MISMATCH REPAIR OREGON STATE UNIVERSITY

Study of antimutagenic processing by human and bacterial mismatch repair systems of UV- and carcinogen-damaged DNA (see *J. Biol. Chem.* 274:16894; Introduction With Colleagues in Oregon State University DNA Repair/Mutagenesis Laboratories). Expected availability: June 1, 2000, but earlier start possible. Ph.D. or M.D. degree with research experience in DNA-protein biochemistry and human cell culture required. Send résumé, including statement of research experience and interests, and three letters of recommendation by March 1, 2000, to: **Dr. John Hays, Department of Environmental and Molecular Toxicology, Oregon State University, ALS 1007, Corvallis, OR 97331. E-mail: haysj@bcc.orst.edu.** *OSU is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.*

POSITIONS OPEN

TWO PLANT MOLECULAR BIOLOGISTS

DNA Plant Technology Corporation, an agricultural biotechnology company focused on fruits and vegetable products, has two openings for Plant Molecular Biologists.

We are seeking recent Ph.D.s in plant molecular biology with a minimum of three years of postdoctoral experience. Applicants should have demonstrated expertise in a wide array of molecular biological techniques, including cloning, sequencing, hybridization, plasmid construction, and library construction/screening, as well as a variety of PCR-based methods (RT-PCR, overlap extension PCR, RACE, etc.).

One opening (Position #00-03) is in our genomics program, in which functional and expression methodologies are being used to develop plant-based strategies for fungal disease resistance. The ability to work in a highly interactive team environment is essential.

The second opening (Position #00-04) is in our program on fruit and vegetable quality. The successful candidate will have worked on a fruit or vegetable quality program previously and will have experience in plant physiology.

We are particularly interested in candidates wanting to apply cutting-edge technologies to real-world agricultural problems. We are committed to excellence in the development of high-quality transgenic products.

Interested individuals should send the names of three references, a résumé, and cover letter referencing Position #00-03 to: **DNA Plant Technology, Attention: Human Resources, 6701 San Pablo Avenue, Oakland, CA 94608. FAX: 510-450-9366.** Visit the DNA Plant Technology Corporation's website: www.dnan.com.

DIVISION DIRECTOR

NATURAL RESOURCES AND ENVIRONMENT

The U.S. Department of Agriculture Cooperative State Research, Education, and Extension Service (CSREES), seeks a qualified candidate to serve as Division Director for the National Research Initiative Competitive Grants Program, Natural Resources and Environment Division. Candidates must have an advanced degree with major study in a natural resources-related discipline, such as natural resource management, forestry, ecology, ecosystem science, environmental sciences related to agriculture, etc. Applicants also should have supervisory experience. *Candidates must be U.S. citizens, and it is preferable that they have a Ph.D. degree or equivalent experience.*

Closing date is March 14, 2000. Applicants must address the Quality Ranking Factors listed in the vacancy announcement. Contact: **Dr. Sally Rockey; Telephone: 202-401-1761; e-mail: srockey@reeusda.gov** for more information. Application procedures and forms are available from: **The Human Resources Division; Telephone: 202-720-6130; website: <http://www.reeusda.gov/hrd/SOM-0593.htm>.** *USDA is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION HÉMA-QUÉBEC QUÉBEC CITY

Héma-Québec is responsible for the collection, testing, and distribution of blood and related products in the province of Québec. The Research and Development Department of Héma-Québec (located in Québec City) invites applications for a Postdoctoral position, available immediately. We are looking for a candidate that has training in molecular cell biology and/or immunology. The selected candidate will join a team that uses cellular and molecular biotechnologies to expand human blood-derived cells and to study the structure and function of human antibodies. The position is offered as a two-year contract. Salary will be based on experience and includes an excellent benefit package. Good interpersonal skills, together with fluency in French, are significant advantages. Interested applicants are invited to send their résumé in confidence no later than March 3, 2000, to:

**Héma-Québec
Service des Ressources Humaines
4045 Côte-Vertu**

**Ville St-Laurent, Québec, H4R 2W7 Canada
FAX: 514-832-1026**

UNSW

THE UNIVERSITY OF NEW SOUTH WALES
SYDNEY AUSTRALIA

FACULTY OF MEDICINE CENTRE FOR THROMBOSIS AND VASCULAR RESEARCH

The Centre for Thrombosis and Vascular Research, with laboratories at UNSW and The Prince of Wales Hospital, was formed in 1992 and has a strong commitment to research encompassing studies on the function of vascular cells and platelets in normal and pathologic processes, autoimmune diseases in haematology, catabolism of plasminogen activators and their inhibitors, and the regulation of transcription factors and the genes they control in vascular cells. The Centre has considerable expertise in cell and molecular biology, and protein chemistry.

Research Officer/ Senior Research Officer (NH&MRC)

FIXED TERM: Salary (NH&MRC) Range: A\$43,941 - A\$47,168 per year (Research Officer); Salary (NH&MRC) Range: A\$49,652 - A\$58,962 per year (Senior Research Officer).

The focus of Professor Chong's group is regulation of blood platelet formation from their precursor cells megakaryocytes. This process (megakaryocyte growth and differentiation) is mediated by several cytokines and key transcription factors which result in specific programs of gene expression. An understanding of this process will provide insights to the causation of leukaemia and related disorders and may lead to better treatment of these disorders.

Essential criteria: a PhD in a relevant area and possession of a strong background in molecular biological techniques.

Desirable criteria: experience in eukaryotic transcriptional regulation.

Enquiries may be directed to Professor Beng H. Chong on telephone (61 2) 9382 9049 or email: b.h.chong@unsw.edu.au, or Dr Melissa Holmes on telephone (61 2) 9385 1303 or email: m.holmes@unsw.edu.au.

PLEASE QUOTE Ref 042SCI

Research Officer/ Senior Research Officer (NH&MRC)

FIXED TERM: Salary (NH&MRC) Range: A\$43,941 - A\$47,168 per year (Research Officer); Salary (NH&MRC) Range: A\$49,652 - A\$58,962 per year (Senior Research Officer).

The successful applicant will join a team investigating the role of the LDL receptor-related protein (LRP) in cardiovascular diseases and the regulation of extra-cellular proteinase activities. The position will allow for the development of independent research areas and applications are encouraged from scientists with interests which fall within the broad area of the Centre's interests.

Essential criteria: a PhD and three to five years post-doctoral experience in protein chemistry and cell biology.

Enquiries can be directed to Professor Colin Chesterman on telephone (61 2) 9382 9047 or email: c.chesterman@unsw.edu.au, or Associate Professor Dwain Owensby on telephone (61 2) 4222 5553.

PLEASE QUOTE Ref 066SCI

FOR BOTH POSITIONS:

Positions are fixed term for one year with a possible extension subject to funding. A knowledge of EEO/AA principles is essential.

Applications close 18 February 2000.

Application Procedure Applicants should submit written applications systematically addressing the selection criteria, QUOTING REFERENCE NUMBER. Include business and private telephone numbers; a complete resume, (copies of academic transcript and qualifications where appropriate); and the names, addresses (and preferably facsimile numbers) of at least two referees to: The Recruitment Officer, Human Resources, The University of New South Wales, Sydney NSW 2052 Australia by applications close date.

www.unsw.edu.au

S19001

UNSW is an Equal Opportunity Employer with a smoke free workplace.

Chief Executive Officer

National Health and Medical Research Council, Australia

The National Health and Medical Research Council is Australia's principal health and medical research funding agency. The NHMRC is also responsible for advising Australian governments on health issues and health ethics.

Following a national review of health and medical research, the Government has announced the doubling of research funding over the next five years in order to ensure that Australia remains at the forefront of international health and medical research. In line with this increased commitment, the Government now wishes to appoint a Chief Executive Officer to the NHMRC. The role of the CEO will be to raise the national and international profile of health and medical research, lead the restructuring of the NHMRC and support the Council in its roles of research policy advocacy, grants administration and leadership in the areas of health advice and health ethics.

The CEO should be an eminent person with leadership and communication skills; a scientific background and a good understanding of health and medical issues, particularly research; and commanding the respect of the health and medical communities.

In particular, candidates should be able to demonstrate:

- *a record of effective leadership and change-management within a complex organisation relevant to health and medical research;*
- *outstanding communication skills, able to build strong relationships with stakeholders - including governments, teaching and research institutes, public health professionals, the business community, philanthropic organisations and consumers - and to be an articulate, persuasive and high-profile advocate for health and medical research; and*
- *good political acumen, with an understanding of government processes and public sector accountability.*

The appointment will be held on a contract of between three and five years and a remuneration package will be negotiated to reflect the importance of the position.

Initial inquiries may be directed to Mr Rob Southey on telephone 61 3 9620 2800 or email search@ckh.com.au. General information on the NHMRC can be accessed on www.health.gov.au/nhmrc

Applications, including full curriculum vitae and details of three potential referees, should be addressed to Mr Rob Southey and forwarded in confidence to the consultants advising on the appointment:

**Cordiner King Hever,
Level 44, Rialto,
525 Collins Street,
Melbourne Victoria 3000,
Australia.**

to arrive no later than Friday 25th February 2000.

POSITIONS OPEN

POSTDOCTORAL AVAILABLE

NIH-funded Postdoctoral position available in a cell-signaling lab using *in vitro* and cellular approaches to investigate: (1) the biophysical and biochemical properties of calmodulin complexes with protein kinases and nitric oxide synthases that define their specific responses to a Ca^{2+} signal and (2) spatio-temporal controls on the relationship between the intracellular concentrations of free Ca^{2+} and Ca^{2+} -calmodulin that shape the overall cellular response to a Ca^{2+} signal. Applications and other inquiries can be sent via e-mail: ajp2o@crocus.medicine.rochester.edu or by mail to: Anthony Persechini, Ph.D., Department of Pharmacology and Physiology, University of Rochester Medical Center, 601 Elmwood Avenue, Box 711, Rochester, NY 14642. For more information on the department, see web-site: <http://www.urmc.rochester.edu/smd/phph>. The University of Rochester is an Equal Opportunity/Affirmative Action Employer.

NMR POSTDOCTORALS: RNA structure/function positions available now and in spring investigating RNA/RNA and RNA/protein interactions, using NMR-manageable experimental systems. Applicants should have macromolecular NMR experience. Our equipment includes: 500 MHz (three channel, three-axis gradients) NMR and access to 600 MHz and 800 MHz instruments. Salary is competitive and commensurate with experience. Applicants reply with: detailed résumé, date available, statement detailing NMR experience/technical ability, and three letters of reference to: P. F. Agris, Biochemistry, Box 7622, North Carolina State University, Raleigh, NC 27695-7622 U.S.A.

The Neurology Department, University of California San Francisco, invites applications for two **POSTDOCTORAL POSITIONS** with a growing laboratory group. Projects involve studies of PARP-mediated cell death, RNA transcription errors as mediators of oxidative cell death and injury, regulation of glutamate transport, and ligand-mediated glutamate release. Experience with molecular biology approaches is preferred. Fellows will have primary responsibility for one project and participate in the others. Please address curriculum vitae or inquiries to: Raymond A. Swanson, M.D., (127) Neurology VAMC, 4150 Clement Street, San Francisco, CA 94121. E-mail: ray@itsa.ucsf.edu.

JOHNS HOPKINS ONCOLOGY CENTER

A **POSTDOCTORAL POSITION** is available to study genes altered in leukemia. A good background in cellular and molecular biology is required. *Preference is given to permanent residents or citizens of the United States.* Please respond by e-mail or FAX with a curriculum vitae and three references to: Donald Small, M.D., Ph.D., CRB Room 2L53, 1650 Orleans Street, Baltimore, MD 21231. FAX: 410-955-8897; e-mail: donsmall@jhmi.edu.

POSTDOCTORAL POSITIONS MOLECULAR NEUROBIOLOGY

Dr. Craig C. Garner: molecular mechanisms of synaptogenesis. Dr. David S. Weiss: GABA receptor structure/function and regulation. Send curriculum vitae and names/addresses of three references to: Ms. Lucas-Biles, Department of Neurobiology, CIRC 529, 1719 Sixth Avenue South, University of Alabama at Birmingham, Birmingham, AL 35294-0021. UAB is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to investigate signaling pathways in insulin action. We use biochemical, molecular, and genetic approaches to study the control of cellular function. Send curriculum vitae to: Dr. John C. Lawrence, Department of Pharmacology, University of Virginia Health System, P.O. Box 800735, 1300 Jefferson Park Avenue, Charlottesville, VA 22908. FAX: 804-982-3575. E-mail: jcl3p@virginia.edu. UVA is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN MOLECULAR PHARMACOLOGY OF CHOLINERGIC RECEPTORS IN NONNEURONAL CELLS University of California, Davis

A position is available for three years to study the molecular pharmacology of cholinergic receptors in skin keratinocytes and fibroblasts. The Ph.D. degree in pharmacology/biochemistry and fluency in the English language are required. Applicants should be proficient in modulating the level of expression of receptors in cultured cells and in biochemical approaches to characterize the function of cholinergic receptors, including the radioligand binding and the enzymatic assays.

We offer a competitive salary and excellent benefit package. Send or FAX a cover letter stating career goals, curriculum vitae, and names of references in the U.S.A. to: Sergei A. Grando, M.D., Ph.D., D.Sc., Department of Dermatology, University of California, Davis, 4860 Y Street, Suite 3400, Sacramento, CA 95817, U.S.A. FAX: 916-734-6793; e-mail: sagrando@ucdavis.edu. Equal Opportunity Employer.

THREE POSTDOCTORAL POSITIONS immediately available to study bacterial virulence genes (Dr. Luis Actis), adenovirus gene expression (Dr. Eileen Bridge), or bacterial mRNA translation (Dr. Gary Janssen). Applicants should possess Doctoral degrees in microbiology, molecular biology, or closely related discipline. Send applications, including curriculum vitae and three letters of recommendation, directly to: the professor of interest (see above), Department of Microbiology, Miami University, Oxford, OH 45056. We offer competitive salaries and benefits. Details of research areas and information on the University and Oxford area are at website: www.muohio.edu/~MBICWIS/. Women and minorities are encouraged to apply.

POSTDOCTORAL ASSOCIATE and RESEARCH SCIENTIST positions available for studies of nuclear receptors/coactivators/corepressors and chromatin remodeling in cancer biology and embryonic development. Experimental systems include primary tumors, embryonic stem cell cultures, and transgenic mice. At least three years of research experience in molecular biology or protein chemistry/purification is required. Send curriculum vitae and names of three references to: Dr. Li-Na Wei, Department of Pharmacology, University of Minnesota, 6-120 Jackson Hall, 321 Church Street S.E., Minneapolis, MN 55455-0217. E-mail: weixx009@maroon.tc.umn.edu. FAX: 612-625-8408. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL FELLOWSHIPS available to utilize molecular approaches to study triglyceride and cholesterol homeostasis in adipose and steroidogenic tissues. Applicants should have a Ph.D. with a strong background in molecular biology, biochemistry, and/or cell biology, and be a U.S. citizen or resident alien. Experience with library screening, mutagenesis, expression and purification of recombinant proteins, and protein-protein interactions is desirable. Send curriculum vitae and references to: Fredric Kraemer, M.D., Division of Endocrinology, S-005, Stanford University, Stanford, CA 94305-5103. FAX: 650-852-3263; e-mail: fbk@stanford.edu. Affirmative Action/Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available to study microtubule motor proteins, especially cytoplasmic dynein and dynactin, and their role in mitosis, neuronal transport, and human brain development and disease. For more information, see website: <http://www.umassmed.edu/celldynamics/faculty/vallee.cfm>. Submit curriculum vitae and names of three references to: Dr. Richard Vallee, University of Massachusetts Medical School, 377 Plantation Street, Worcester, MA 01605; e-mail: Richard.Vallee@Umassmed.edu. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS at Lipid Research, Washington University School of Medicine, St. Louis, Missouri, U.S.A. Two NIH-funded projects: (1) molecular genetics and metabolic studies of dyslipidemic syndromes, including linkage studies, positional cloning, and kinetic studies of apolipoproteins and lipids in humans *in vivo*, and (2) molecular/cell biologic bases of low cholesterol, including construction of mice expressing appropriate defects and phenotypic characterizations, using *in vivo* and cell culture studies. Postdoctoral candidates must have good knowledge of quantitative genetics, cell/molecular biology, or human metabolic studies to qualify. Contact: Gustav Schonfeld, M.D.; e-mail: gshonfe@im.wustl.edu; FAX: 314-362-3513.

A **POSTDOCTORAL POSITION** is available to study mechanisms and signaling pathways controlling cytokine and protooncogene mRNA turnover and to conduct characterization of participating proteins (EMBO J. 17:3461, 1998; Genes Dev. 13:1884, 1999). Seek self-motivated individuals with working knowledge of current techniques in molecular biology and protein isolation. For additional information, see website: <http://www-bmb.med.uth.tmc.edu/pfac.html>. Send curriculum vitae and names of three references to: Dr. Ann-Bin Shyu, Department of Biochemistry and Molecular Biology, University of Texas-Medical School, 6431 Fannin Street, Houston, TX 77030. E-mail: abshyu@bmb.med.uth.tmc.edu.

POSTDOCTORAL POSITION

RESEARCH ASSOCIATE/Postdoctoral position is immediately available to conduct NIH-funded research on molecular mechanisms of prostate tumorigenesis and differential gene expression. Candidate should have a Ph.D. and a strong background in molecular biology techniques, LCM, subtractive hybridization, RT-DD, or microarray technology. Stipend commensurate with experience. Contact: Dr. Asim B. Abdel-Mageed, Tulane University School of Medicine, Department of Urology, 1430 Tulane Avenue, New Orleans, LA 70112. Tulane University is a nondiscriminatory Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION for NSF-funded study of thyroid hormone actions in adult brain. Desirable techniques include stereotaxic implantation, EEG recordings in rats, receptor binding determinations, and tracer or patch clamp assays of ionotropic receptor activity. Support available March 2000 for at least one-and-one-half years. Applicants should send a curriculum vitae and three letters of recommendation to: Joseph V. Martin, Ph.D., Biology Department, Rutgers University, 315 Penn Street, Camden, NJ 08102-1411. E-mail: jomartin@crab.rutgers.edu. Rutgers University is an Affirmative Action/Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available March 1, 2000, to study Type I and Type II interferons, with emphasis on postreceptor events, endocytosis, signal transduction pathways, and subsequent modulation of cell cycle. Areas of expertise should include immunology, biochemistry, and molecular biology. Please send curriculum vitae and the names of three references to: Dr. Howard M. Johnson, Department of Microbiology and Cell Science, Box 110700, University of Florida, Gainesville, FL 32611. Telephone: 352-846-0968; FAX: 352-392-5922; e-mail: hjohnson@micro.ifas.ufl.edu.

POSTDOCTORAL POSITIONS to study mechanisms of integrin modulation of signal transduction. A Ph.D. in a biomedical science and substantial experience with molecular biology techniques are essential. Please send curriculum vitae and names of two references to: Dr. R. L. Juliano, Department of Pharmacology, CB# 7365, University of North Carolina-Chapel Hill, Chapel Hill, NC 27599-7365. Website: <http://www.med.unc.edu/wrkunits/2depts/pharm/juliano.htm>. An Equal Opportunity/Affirmative Action Employer.



The University of Sydney AUSTRALIA

Director

Institute of Marine and Ocean Science, College of Sciences and Technology

Reference No: A04/000102

The University of Sydney has strengths across a wide range of marine science. To coordinate and enhance existing strengths, the University has formed an Institute of Marine and Ocean Science.

Applications are now invited for the position of Foundation Director of the Institute. The successful applicant will be responsible for the facilitation of research in Marine and Ocean Science and the promotion of the Institute within the University and to the wider community. The Director will play an important role in interacting with other Marine Science bodies, with the Department of Industry, Science and Resources, the Department of Education, Training and Youth Affairs and with other State and Federal agencies.

The successful applicant will provide the strategic vision for the future development of the Institute within the context of the University's Strategic Plan and through leadership and drive, transform that vision into a reality. Applicants should set out in their applications their vision of how they would develop the Institute so that it becomes self-sustaining.

Marine Science at the University of Sydney has strengths across a wide range of activities and disciplines including expertise in both tropical and temperate marine biology, coastal ecology, oceanography, marine geosciences and geotechnical engineering, marine engineering and mechatronics. Although the Institute will initially reflect expertise in biological, geoscience and engineering sciences, this will not preclude participation by areas within social sciences and the humanities. The Director will plan the strategic directions of the Institute with the assistance of an Advisory Board that is representative of all major Marine Science interests within the University. The Director will have responsibility for coordinating both the undergraduate and postgraduate teaching programs in Marine Science, in which activity the Director will report to the appropriate Deans. The opportunity may exist for the successful candidate to undertake some voluntary teaching.

The successful applicant will be an internationally distinguished researcher in Marine and Ocean Science with a demonstrated capacity to attract both funds and students to the area. He or she will possess superior management and strategic planning expertise and high level communication and interpersonal skills. He/she will have the ability to build on and enhance the extensive links already established by the University.

The position is available for a fixed-term period of five years. There is the possibility of a further offer of employment subject to funding and the mutual agreement of the parties concerned. The successful applicant will hold the title of Professor.

A total remuneration package of up to AUD\$111,624 p.a. is offered, composed of Level E professorial salary, employer contributions to superannuation, annual leave loading and an expense of office allowance that is paid against expenses. Additional benefits would be subject to negotiations. Membership of a University approved superannuation scheme is a condition of employment for new appointees.

Further enquires should be directed to Professor David Siddle, Pro-Vice-Chancellor (Research), Main Quadrangle (A14), The University of Sydney NSW 2006, telephone (61-2) 9351 4138, email: dsiddle@mail.usyd.edu.au or to Professor Don Napper, Pro-Vice-Chancellor (College of Sciences and Technology), Peter Nicol Russell Building (J02), The University of Sydney, telephone (61-2) 9351 2754 or email: pvc@cst.usyd.edu.au

Closing: 30 March 2000

APPLICATIONS:

Ten copies of application, including curriculum vitae, full list of publications and the names, addresses and fax numbers of five referees, should be lodged with Personnel Services, College of Sciences and Technology, Carslaw Building, F07, The University of Sydney, NSW 2006, Australia. A copy of the information brochure can be obtained from Personnel Services, telephone (61-2) 9351 2566, email: personnel@cst.usyd.edu.au

*The University is a non-smoking workplace and is committed to the policies and principles of equal employment opportunity and cultural diversity.
The University reserves the right not to proceed with any appointment for financial or other reasons. See <http://www.usyd.edu.au/>*

518748

ANNOUNCEMENTS



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

The New Energy and Industrial Technology Development Organization (NEDO) is planning to launch one (1) new research and development project in FY1999 based on funds provided by the Ministry of International Trade and Industry (MITI) of Japan. This new research and development project is as follows: F2 Laser Lithography Technology. NEDO invites applications from organizations interested in participating in the above project. Details regarding application procedures, project outline and the date and the place of explanatory meeting were posted on NEDO's homepage (<http://www.nedo.go.jp>) and announced in MITI International Bulletin on January 26, 2000.

Applied Technology Department Fax: 81-3-3987-9396

New Energy and Industrial Technology Development Organization

Sunshine Building 60 29F 3-1-1, Higashi-Ikebukuro, Toshima-ku, Tokyo, Japan

POSITIONS OPEN

POSTDOCTORAL POSITION IN MARINE BIOLOGY

Bowdoin College invites applications for a Postdoctoral position in marine biology at its multidisciplinary Coastal Studies Center (CSC). This position provides opportunities for research and teaching at the CSC's running-seawater laboratory. The position involves maintaining an active research program, teaching a one-semester seminar course, and supervising two undergraduates doing independent research. An appropriate mentor will be assigned from the Bowdoin faculty; thus, a wide range of fields involving marine organisms are welcome.

The CSC ([website: http://academic.bowdoin.edu/csc/](http://academic.bowdoin.edu/csc/)) is located on Orr's Island, 20 minutes from campus. It includes 118 acres of forests and fields with two-and-one-half miles of marine shoreline, marine and terrestrial laboratories, and a renovated farmhouse where the successful applicant will be expected to reside. The position entails some curatorial duties at the marine laboratory and on the CSC property. The position is for one year; renewable for a second year.

Applicants must have received or anticipate receiving a Ph.D. between July 1, 1994, and July 1, 2000. Position starts June 1 or July 1, 2000. Review of applications begins March 10, 2000.

Please send: letter of application, curriculum vitae, statement of research and teaching interests, suggested research mentor from the Bowdoin faculty, and three letters of recommendation to:

Olaf Ellers, Director
Coastal Studies Center
6775 College Station
Bowdoin College
Brunswick, ME 04011-8465

Bowdoin College is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

U.S. Department of Agriculture (USDA), Agricultural Research Service, is seeking a **POSTDOCTORAL RESEARCH ASSOCIATE** to conduct research in the area of molecular biology. This is a temporary position for two years. The incumbent will construct and analyze promoter sequences that confer tissue specificity and timing for genes involved in fruit ripening. Test systems will include tomato, plum, and peach. Skill in molecular biology techniques, tissue culture, and plant transformation required. Ph.D. is required; salary range is \$42,724 to \$66,564 commensurate with experience, plus benefits. Please send curriculum vitae and the names of three references to: **Ann M. Callahan, USDA-ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, WV 25430. E-mail: acallaha@afrrs.ars.usda.gov. USDA/ARS is an Equal Opportunity Provider and Employer.**

A **POSTDOCTORAL POSITION** is available for genetic studies of nutraceutical plants, including echinacea and St. John's wort. This NIH-funded position is a joint project between **Drs. A. M. Hirsch and S. Jacobsen** of the MCD Biology department and **Dr. D. Heber** of the Center for Human Nutrition at UCLA. The candidate should be a skilled molecular biologist. *U.S. citizenship or permanent residency is required.* Please send curriculum vitae, letter of professional goals, and names and e-mail addresses of three references to: **Dr. A. M. Hirsch, Department of MCD Biology, 405 Hilgard Avenue, UCLA, Los Angeles, CA 90095-1606.**

THREE POSTDOCTORAL ASSOCIATE POSITIONS: Institute of Marine and Coastal Sciences/Rutgers, The State University of New Jersey. One-year appointments (renewable) in the area of biological, chemical, geological, and physical oceanography. Please send résumé, a statement of research interest, and the names of three references by February 29, 2000, to: **Dr. J. Frederick Grassle, Rutgers, The State University, Institute of Marine and Coastal Sciences, 71 Dudley Road, New Brunswick, NJ 08901-8521. Rutgers 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.

www.training.nih.gov

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

POSTDOCTORAL POSITIONS CELL AND MOLECULAR BIOLOGY

Positions are available to study the mechanism of action of thymidylate synthase and deoxycytidylate deaminase, both targets for cancer chemotherapy. Gene isolation and amplification of their protein products in eukaryotic and prokaryotic systems will be required. In addition, site-specific mutagenesis will be employed to establish the relation of structure to function of these enzymes, as well as factors affecting their intracellular location, such as protein phosphorylation and signal transduction. The interaction of these enzymes in regulating DNA synthesis will also be investigated. Cloning, sequencing, and tissue culture experience are desirable. The research will be conducted in a well-equipped core facility. Compensation from Health Research Inc. dependent upon experience. Send résumé and three references to: **Dr. Frank Maley, Wadsworth Center for Laboratories and Research, Empire State Plaza, Box 509, Albany, NY 12201. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

A **POSTDOCTORAL POSITION** in organic synthesis is available. Candidates with a Ph.D. degree either in synthetic organic or medicinal chemistry are solicited to join a research team in synthesis of ligands for CNS dopamine and serotonin receptors. Major emphasis will be in organic synthesis of novel compounds for drug development. Send résumé to: **Dr. Hank F. Kung, Room 305, 37000 Market Street, Departments of Pharmacology and Radiology, University of Pennsylvania, Philadelphia, PA 19104. E-mail: kungfh@sunmac.spect.upenn.edu; website: http://sunmac.spect.upenn.edu/.**

POSTDOCTORAL POSITION

We explore the mechanism by which HIV evolves through recombination, using RNA biochemistry and cell culture. We study regulation of human DNA replication and repair of chromosomal damage. Our group has an excellent record of future employment as academic faculty and corporate researchers. Send a curriculum vitae and three recommendations to: **Dr. Robert Bambara, Biochemistry and Biophysics, Box 712, University of Rochester, Rochester, NY 14642. Website: www.urmc.rochester.edu/smd/bcbp.**

POSTDOCTORAL AND RESEARCH ASSOCIATE positions available to conduct research on the role of sphingolipids as signal transducers during stress responses in *Saccharomyces cerevisiae* (*J. Biol. Chem.* 272:30196 and 273:19437; *Ann. Rev. Biochem.* 67: 27). Experience with yeasts, lipids, enzymology, or signal transduction is required. Send résumé with names of three references to: **Robert Dickson, Department of Biochemistry, University of Kentucky, Lexington, KY 40536-0298.**

POSTDOCTORAL POSITION available to study the folding and membrane interactions of the recombinant prion protein. Background in biophysical chemistry of proteins required. Experience in DNA manipulation and site-directed mutagenesis would be a plus. Send curriculum vitae to: **W. K. Surewicz, Ph.D., Institute of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106. E-mail: wks3@pop.cwru.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS LINUS PAULING INSTITUTE OREGON STATE UNIVERSITY

(1) Position available to study molecular and biochemical mechanisms of colorectal carcinogenesis. The work will focus on gene-diet interactions, with specific emphasis on dietary carcinogens and chemopreventive agents and the b-catenin signaling pathway. Contact: **R. H. Dashwood, Ph.D.; e-mail: rod.dashwood@orst.edu.** (2) Position available to study the extent and nature of mitochondrial decay in aging. Experience in cell isolation or tissue slice techniques, confocal microscopy, measurement of mitochondrial function, and/or apoptosis. A background exploring the role of mitochondria in apoptosis is preferred but not required. Contact: **T. M. Hagen, Ph.D.; e-mail: tory.hagen@orst.edu.** (3) Position available to study how mitochondrial decay affects cardiac function. Experience in measurement of mitochondrial or cardiac function (Langendorff perfusion and cardiac pacing). Contact: **T. M. Hagen, Ph.D.; e-mail: tory.hagen@orst.edu.** Successful candidates will have a Ph.D. in biochemistry or related field, a strong publication record in peer-reviewed journals appropriate to the research area, and excellent written and oral communication skills. Send curriculum vitae; summary of research experience; and names, telephone numbers, and e-mail addresses of three references to: **the contact person (see above), Linus Pauling Institute, Oregon State University, 571 Weniger Hall, Corvallis, OR 97331-6512. Telephone: 541-737-5075; FAX: 541-737-5077. OSU is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to dual-career needs.**

POSTDOCTORAL POSITION AT BOSTON UNIVERSITY GENE REGULATORY NETWORKS

Available immediately to develop synthetic gene regulatory networks capable of controlling the temporal expression of genes (see *Nature* 403:339, 2000). Applicant will work with **Drs. J. J. Collins and Charles Cantor** in the Center for BioDynamics and Center for Advanced Biotechnology. Applicants must have a Ph.D. or M.D. and be experienced in eukaryotic cell culture and transfection, microscopy, and standard recombinant DNA techniques. Experience with viral-, liposome-, or receptor-mediated gene transfer techniques is also desirable.

Position available for one to three years. Applicants should send a brief statement of past and current research interests, a curriculum vitae, and names of three references to: **Dr. J. J. Collins, Department of Biomedical Engineering, Boston University, 44 Cummington Street, Boston, MA 02215. FAX: 617-353-5462.**

POSTDOCTORAL POSITION is available immediately to work on the role of fibroblast growth factor receptor in the development and maintenance of glial cell-derived brain tumors. The candidate should be highly motivated with a background in cell biology, molecular biology, or gene therapy. A working knowledge of RNA biology would be beneficial. Send curriculum vitae to: **Gilbert J. Cote, M.D., Anderson Cancer Center, Section of Endocrinology, Box 15, 1515 Holcombe Boulevard, Houston, TX 77030. E-mail: gcote@mdanderson.org. Smoke-free environment. Equal Employment Opportunity Employer.**

POSTDOCTORAL POSITIONS available immediately to study (1) biological functions of the tumor suppressor BRCA1 in preventing development of familial breast and ovarian cancers and (2) control of chromosomal DNA replication. Highly motivated individuals with experience in molecular biology and biochemistry are encouraged to apply. Send curriculum vitae and the names of three references to: **Rong Li, Ph.D., Department of Biochemistry and Molecular Genetics, Health Sciences Center, University of Virginia, Charlottesville, VA 22908. E-mail: rl2t@virginia.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITION DEPARTMENT OF RADIATION ONCOLOGY UNIVERSITY OF MICHIGAN

Postdoctoral positions are currently available in the Division of Radiation and Cancer Biology, Department of Radiation Oncology, University of Michigan Comprehensive Cancer Center to study cellular and molecular aspects of human breast carcinogenesis and to develop novel translational strategies for breast cancer therapy. The Division includes five laboratories with additional areas of investigation relating to drug radiation interactions, enzyme/prodrug gene therapy, radiation-induced signal transduction, and triggering of p53 induction and apoptosis. Successful candidates will have a Ph.D. and a strong background in cell and/or molecular biology and a strong interest in cancer biology. Interested applicants should send their curriculum vitae and names of three references to: **Stephen P. Ethier, Ph.D., Radiation and Cancer Biology Division Director, Department of Radiation Oncology, University of Michigan Health Systems, 1500 East Medical Center Drive, 7312 CCGC, Ann Arbor, MI 48109-0948. Equal Opportunity Employer.**

TWO NIH-FUNDED POSTDOCTORAL POSITIONS: molecular biology/biophysics at The University of Texas Medical School, Galveston, Texas, to study transcriptional regulation of potassium ion channels and neurotransmitter receptors in basolateral membranes of sensory cells (hair cells) of the ear. Qualifications: Ph.D. or M.D., solid background in molecular biology, patch clamp techniques preferred but can be acquired. Reply to: **Manning Correia, Ph.D., University of Texas Medical Branch, 301 University Boulevard, MRB 7.102, Galveston, TX 77555-1063. E-mail: correia@enterpris. utmb.edu. UTMB is an Equal Opportunity/Affirmative Action Employer; Minorities/Females/Disabled/Veterans. UTMB hires only individuals authorized to work in the United States.**

GLOBAL OPPORTUNITIES

POSTDOCTORAL FELLOWS INSTITUTE OF MOLECULAR AND CELL BIOLOGY Singapore

The Institute of Molecular and Cell Biology (IMCB), Singapore, was established in 1987. Rated by *Nature* 394:604, 1998, as having "... built an impressive publication record by any standards," it has an international staff of over 250 people carrying out basic and applied research in a well-equipped facility. The IMCB is now inviting applications for Postdoctoral Fellows in programs in any of the following research areas: (1) signal transduction in mammalian cells (tyrosine phosphatases, JAK/STATs, cytokines, growth factors, G proteins, PAK, TNFs); (2) yeast genetics and cell cycle; (3) *Drosophila* neurobiology; (4) protein trafficking; (5) DNA repair and carcinogenesis; (6) neural differentiation; (7) apoptosis; (8) marine molecular genetics (*Fugu*); (9) immunology and gene targeting; (10) human papillomavirus biology; (11) tuberculosis and drug development; (12) fungal pathogenesis; (13) synthetic and combinatorial chemistry; and (14) proteomics and mass spectrometry.

Applicants should have an international publication record. Contracts are for up to three years in the first instance, and there are opportunities for career advancement. Competitive salaries are offered depending on experience. Additional benefits are a substantial gratuity payment on completion of contract (non-contributory), medical coverage, a generous housing subsidy, and a low rate of income tax of around 10% of salary. For more detailed information, visit our website: www.imcb.nus.edu.sg.

Applicants should post, FAX, or e-mail their curriculum vitae, together with the names of three references, to: **The Director, Institute of Molecular and Cell Biology (an institute affiliated to The National University of Singapore), 30 Medical Drive, Singapore 117609, Republic of Singapore. FAX: Singapore 777-0402; e-mail: mcbecmk@imcb.nus.edu.sg.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS are available immediately in the Emory University Division of Cardiology Vascular Biology Center ([website: http://www.emory.edu/CARDIOLOGY](http://www.emory.edu/CARDIOLOGY)). Studies emphasize the molecular regulation of redox state, cell growth, and gene expression in vascular disease. Experimental approaches include molecular cloning, protein analysis, cell culture, electron spin resonance spectroscopy, and use and creation of transgenic animals. Funding is available through an NIH training grant. *U.S. citizens or permanent residents only.* Curriculum vitae with a cover letter should be sent to: **Carolyn Morris, Emory University School of Medicine, 1639 Pierce Drive, 319 WMB, Atlanta, GA 30322.** Applications may also be sent by e-mail to: cmorr07@emory.edu. *Emory University Division of Cardiology is an Equal Opportunity Program Employer.*

POSTDOCTORAL POSITION. Available immediately with the U.S. Department of Agriculture (USDA) Agricultural Research Service, Western Human Nutrition Research Center, Davis, California. Research on the bioavailability and metabolism of potential anticancer citrus limonoids. A Ph.D. in human nutrition, physiology (metabolism), or pharmacology/toxicology required. Experience with human bioavailability or pharmacokinetic studies desired. Two-year position funded at \$42,900/year. FAX curriculum vitae to: **Robert A. Jacob, Ph.D.; FAX (Telephone): 530-752-8502 (-4726).** *USDA is an Equal Opportunity Provider and Employer.*

EUROPEAN OPPORTUNITIES

POSTDOCTORAL POSITION IN PANCREATIC DEVELOPMENT

Applications are invited for a Postdoctoral position at the Department of Microbiology and Molecular Genetics, Umea University, Sweden. The project will involve characterization of gene networks involved in regulation of pancreatic cell specification, growth, and differentiation. The ideal candidate will have a strong background in mouse embryology and transgene technology, although candidates with experience in other vertebrate systems will be considered. Experience in molecular and cellular biology is essential. Interested candidates should send their curriculum vitae and the names and addresses of three references to: **Dr. Helena Edlund, Department of Microbiology and Molecular Genetics, Umea University, Umea, SE-901 87 Sweden. E-mail: Helena.Edlund@micro.umu.se.**

BIOINFORMATICS POSTDOCTORAL POSITION(S) at the Center for Genomics Research (CGR), Karolinska Institutet, in Stockholm, Sweden. The focus is on functional inferences in genes and genomes, approached by both applied analysis projects and development of novel methods and algorithms. Applicants with a Ph.D. (preferably in molecular biology or a related field) and demonstrable experience in bioinformatics are welcome to submit an application with research interests and curriculum vitae to: **Dr. Erik Sonnhammer, CGR, Karolinska Institutet, S-171 77 Stockholm, Sweden. E-mail: Erik.Sonnhammer@cgr.ki.se; website: <http://www.cgr.ki.se>.**

A bioinformatics **POSTDOCTORAL POSITION** is available at the Center for Genomics Research, Karolinska Institutet, Stockholm, Sweden. The focus of the project is the establishment of a comparative genome sequence database. Applicants with a Ph.D. (preferably in either molecular biology or computer science) with experience in bioinformatics are welcome to submit applications with curriculum vitae to: **Dr. Niclas Jareborg, Center for Genomics Research, Karolinska Institutet, S-171 77 Stockholm, Sweden. E-mail: niclas.jareborg@cgr.ki.se; FAX: +46-8-337983.**

POSITIONS OPEN

POSTDOCTORAL POSITION UNIVERSITY OF MINNESOTA MINNEAPOLIS-ST. PAUL

A Postdoctoral position is available to investigate structure-function relationships in the photosynthetic proteins, Photosystem II and I. A variety of biochemical and biophysical approaches will be employed: techniques include reaction-induced FT-IR and EPR spectroscopies, as well as site-directed mutagenesis. Applicants should have a Ph.D. degree in biochemistry, chemistry, biophysics, or related discipline. Please send curriculum vitae and three letters of reference to: **Professor Bridgette A. Barry, Department of Biochemistry, Molecular Biology, and Biophysics, 140 Gortner Laboratory, 1479 Gortner Avenue, St. Paul, MN 55108. Telephone: 612-624-6732; e-mail: barry@biosci.cbs.umn.edu.** *The University of Minnesota is an Equal Opportunity Employer.*

MARKETPLACE

frimorfo
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. 3 on Readers' Service Card

glp/cGMP Synthesis
~ Specialty & Activated Reagents
~ PEGs/Specialty Media

Magellan Laboratories
[www.magellanlabs.com/\(919\)465-8119](http://www.magellanlabs.com/(919)465-8119)

Circle No. 38 on Readers' Service Card

Molecular Biology Insights **Cligo** Since 1989

Primer Analysis Software
800 747 4362 www.oligo.net

Circle No. 36 on Readers' Service Card

Custom DNA Sequencing

- ❖ Long Reads ❖
- ❖ Plasmid Inserts ❖
- ❖ Sequence Done in a Week ❖
- ❖ Single Strand as low as ❖
\$20.00 for < 650 bases
- ❖ Double Strand ❖
\$30.00 up to 450 bases
\$45.00 up to 650 bases
\$70.00 up to 1600 bases

Inquire about Large Inserts and
Genome Sequencing.

MWG-BIOTECH, Inc.
Call 336-812-9995 info@mwgbiochem.com
<http://www.mwgbiochem.com>

Circle No. 42 on Readers' Service Card

MARKETPLACE



**MORE PRODUCTS
ON PREVIOUS PAGE**

Widely
Recognized
Original &
Guaranteed

KlenTaq1

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

US Pat # 5,436,149

Call: **Ab Peptides** 1-800-383-3362
Fax: 314-968-8988 www.abpeps.com

Circle No. 6 on Readers' Service Card

**Vapor Pressure
Osmometer**

The preferred method of
measuring the osmolality
of any biological fluid.

WESCOR, INC. 1-800 453-2725

Circle No. 39 on Readers' Service Card

3 O.D. Select Oligos

Just \$0.60/base*

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

*Desalted only. Oligos must be 10 to 35 bases in length. No modifica-
tions or additional purification. Web orders only. Offer valid in U.S. only.

SIGMA
GENOSYS

North America: 1-877-710-1504 • email: gordentry@sigal.com

Circle No. 32 on Readers' Service Card

CUSTOM SHOTGUN DNA LIBRARIES

- BAC, PAC, P1, Cosmid or other large insert clones acceptable
- Random M13 or pUC18 plasmid library provided
- High quality; >95% insert ratio
- 1-2 week turnaround time
- Customer satisfaction guaranteed

DNA sequencing and mini-prep services available

seqwright TEL (713) 528-4363
FAX (713) 528-6232
800-720-4363 www.seqwright.com
seq@blkbbox.com

Circle No. 40 on Readers' Service Card

XX IDT
INTEGRATED DNA TECHNOLOGIES, INC.

Premier Specialty Synthesis
Molecular Beacons, RNA,
Antisense Oligos & More

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

Circle No. 34 on Readers' Service Card

MARKETPLACE

**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. 45 on Readers' Service Card

QUALITY DNA SYNTHESIS

MALDI-TOF Mass Spectrometry Quality Control
Fluorescent Dyes & Other Modifications
Gene Construction & Sequencing Services
Custom RNA Oligos & Antisense DNA Oligos
Custom Primers for PCR & Sequencing
Long Oligos (up to 150-mers)
Competitive Pricing

MIDLAND

The Midland Certified Reagent Company
1-800-247-8766 • FAX: 1-800-359-5789
www.mcrc.com • email: mcrc@oligos.com

Circle No. 35 on Readers' Service Card

**Highly Purified Salt-Free
Oligonucleotides**

Custom DNA Synthesis

HPSF & PSF Grade

- ❖ Failure Products Removed
- ❖ Salt Removed
- ❖ No Metal Ions
- ❖ MALDI-TOF Production QC

Starting at \$0.49/base for
PSF Grade (0.01 µmol scale)
Never a purification or
setup fee!!!

MWG-BIOTECH, Inc

Call: 336-812-9962 info@mwgbio.com
<http://www.mwgbio.com>

Circle No. 43 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. 4 on Readers' Service Card

MERLIN® CORE SERVICES



Plasmid Purification
Endotoxin Removal
Any Amount

1-800-4-BIO-101 • www.bio101.com

Circle No. 44 on Readers' Service Card

MARKETPLACE

TRY THE NEW WAY TO CELEBRATE Y2K!!!

BIO-SYNTHESIS, INC.

\$12.00/oligo

Don't Count Bases! Count Oligos!

Turnaround Times: 12-24 hours
- Monomers: >1.0M; up to 25 bases
- Full G.C. and reliable quality

or \$18.00/oligo (up to 35 bases)

www.biosyn.com 1-800-227-0027

Circle No. 41 on Readers' Service Card

Quality Peptides & Antisera

Friendly, Personal Service
www.genosys.com

Custom Peptide Synthesis

- sequence analysis
- IG, >70%, >80%, >95% purity
- scales from 2 mg-1 g
- 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

SIGMA
GENOSYS

North America
1-877-710-1502
info@sigma-genosys.com

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

Circle No. 33 on Readers' Service Card



BIOSOURCE
INTERNATIONAL

Custom Antibodies & Peptides

No Hidden Charges!

Custom Antibodies from \$1295 include:

- 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 1mg to 10g
HPLC purification available up to 98+%!

800-435-2080 • Fax: 508-435-2199
Order on-line: www.qcb.com

Circle No. 37 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. 2 on Readers' Service Card

Custom Sequencing

SEQEXPRESS - \$29/run
<http://www.resgen.com>

Research Genetics
1-800-533-4363

Circle No. 46 on Readers' Service Card

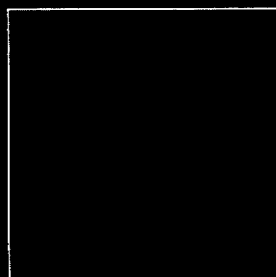
In Vivo Gene Delivery

2 log or better increase in DNA expression*

Additional Benefits:

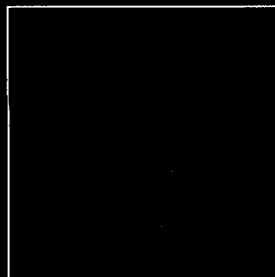
- Reduces variability (more reproducible results)
- Widely applicable to different tissues & animal models
- Persistent expression (months) in muscle without integration
- Results in different species: wide applicability
- Simple, using plasmid DNA (less expensive than viral vectors)

*over DNA injection alone

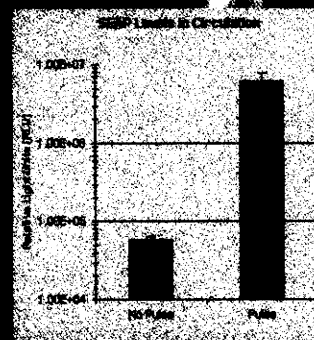


Without Electroporation

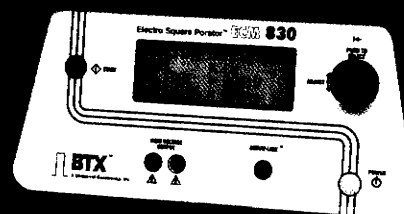
Confocal GFP
imaging of Mouse
Tibialis Muscle
after single injection
of 20 µg plasmid
DNA



Using Electroporation



Come see the latest in
Electroporation technology
at the
Biophysical Society meeting
New Orleans
Feb 13-15, 2000
Booth# 226



ECM 830
Square Wave Electroporator

BTX

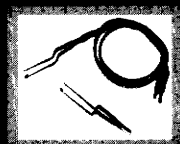
The Electroporation Experts

1-800-289-2465

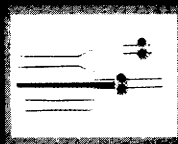
(858) 597-6006 fax: (858) 597-9594

Outside U.S.A. / Canada, contact:

kparisi@genetronics.com



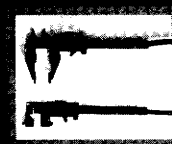
Tweezer Electrodes™



Genetrodes™
U.S. Patent # 5,702,359



2-Needle Array
U.S. Patent # 5,273,525 & 5,702,359

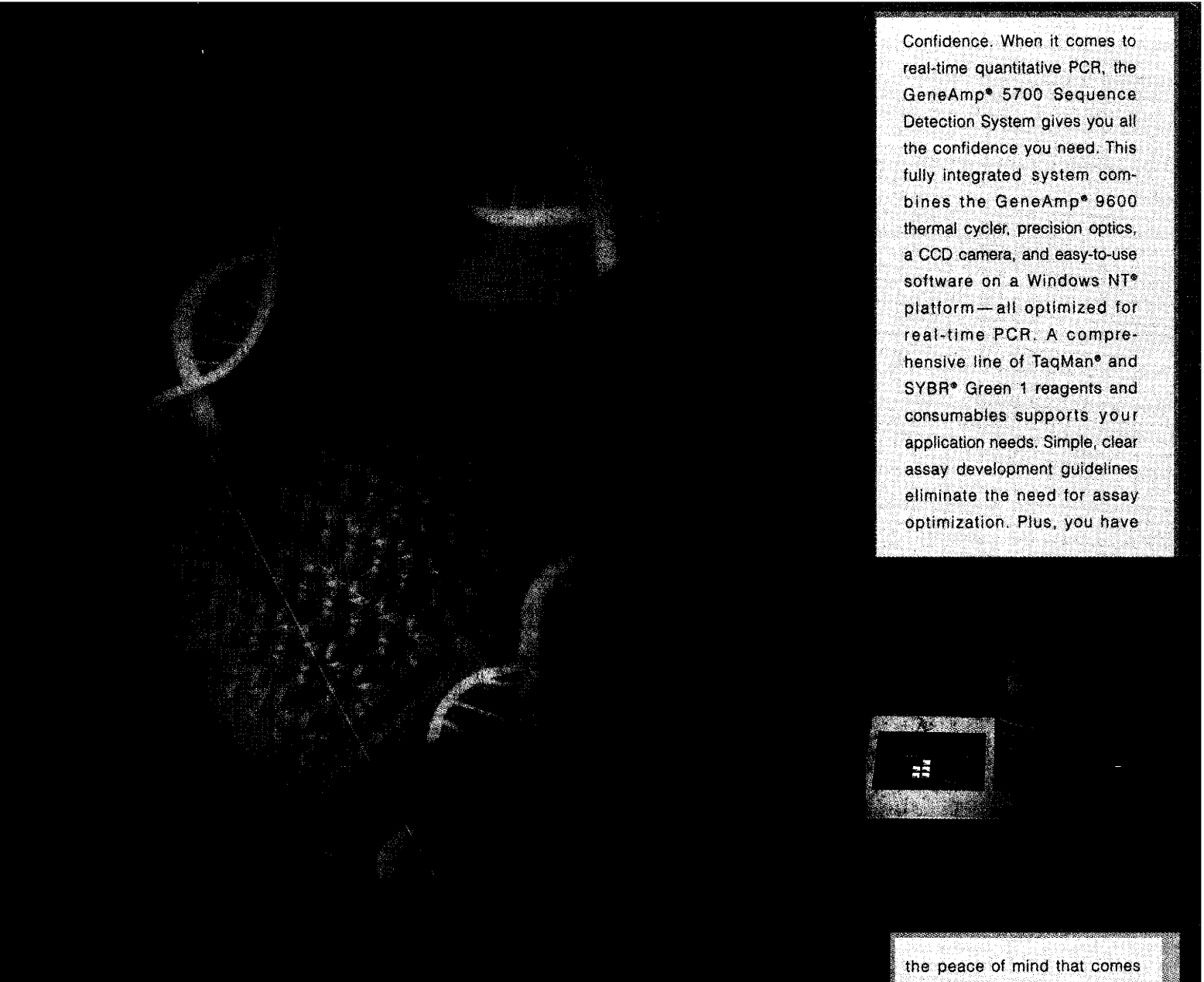


Caliper Electrodes

Circle No. 24 on Readers' Service Card

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

The method of choice!



Confidence. When it comes to real-time quantitative PCR, the GeneAmp® 5700 Sequence Detection System gives you all the confidence you need. This fully integrated system combines the GeneAmp® 9600 thermal cycler, precision optics, a CCD camera, and easy-to-use software on a Windows NT® platform—all optimized for real-time PCR. A comprehensive line of TaqMan® and SYBR® Green 1 reagents and consumables supports your application needs. Simple, clear assay development guidelines eliminate the need for assay optimization. Plus, you have

What makes one instrument
different from another?

the peace of mind that comes with the PE Biosystems PCR performance guarantee and worldwide technical and service support. For complete confidence in real-time quantitative PCR, check out the GeneAmp® 5700 Sequence Detection System. Call 650-638-5800 or visit our website at www.pebiosystems.com. The difference is confidence.

GeneAmp® 5700 Sequence Detection System

Applied Biosystems

PE Biosystems
A PE Corporation Business

Circle No. 18 on Readers' Service Card

PE Corporation, formerly The Perkin-Elmer Corporation, is committed to providing the world's leading technology and information for life scientists. PE Corporation consists of the PE Biosystems and Celeris Genomics businesses. PE Biosystems comprises four divisions—Applied Biosystems, PE Informatics, PerSeptive Biosystems, and Tropix. PE and PE Biosystems are trademarks and Applied Biosystems is a registered trademark of PE Corporation or its subsidiaries in the U.S. and certain other countries. Windows NT is a registered trademark of Microsoft Corporation. GeneAmp and TaqMan are registered trademarks of Roche Molecular Systems, Inc. SYBR is a registered trademark of Molecular Probes, Inc. The PCR process and the 5' nuclease process are covered by patents owned by Roche Molecular Systems, Inc. The purchase of this instrument includes no rights under 5' nuclease process patents. The SYBR® Green dye is sold pursuant to a limited license from Molecular Probes, Inc. For Research Use Only. Not for use in diagnostic procedures. ©2000 PE Biosystems. Printed in the USA.