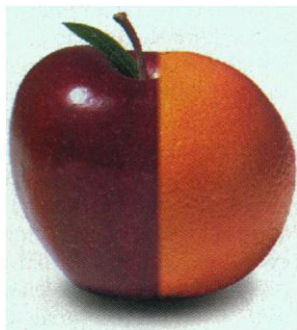


At 60¢ *per base*, OPERON'S DNA makes *anything* POSSIBLE.



THE APPLORANGE



THE ZUCCHANA



GREAT VALUE AND TREMENDOUS SAVINGS FROM THE WORLD'S LEADING SUPPLIER OF DNA.

Operon's highly competitive prices and full line of DNA synthesis scales, options, and modifications present a whole new world of possibilities. Our custom DNA is now available from just 60¢ per base, so you can afford to do more experiments and get more results.

Operon consistently delivers precisely the product you need, on time, with unsur-

Custom DNA Synthesis Prices

Scale	Price/base	Set-up
0.05 μ mole	\$0.60	\$5.00
0.2 μ mole	\$1.20	\$10.00
1.0 μ mole	\$2.40	\$20.00



OPERON

WORLD'S LEADING SUPPLIER
OF SYNTHETIC DNA

passed purity and backed by our unconditional guarantee. Imagine all of this at extremely competitive prices. We ship our custom-made sequences in 24 hours on average, including large orders and orders placed late in the day.

So don't let your budget limit your thinking!

CALL OPERON, THE COMPANY THAT MAKES ANYTHING POSSIBLE.

1-800-688-2248, EXT.100, FOR MORE INFORMATION

©1998 OPERON TECHNOLOGIES, INC. 1000 ATLANTIC AVENUE, SUITE 108, ALAMEDA, CA 94501. PHONE: 510-865-8644. FAX: 510-865-5255. NIHBP 263-00033233.

Circle No. 79 on Readers' Service Card

(continued from page 1957)

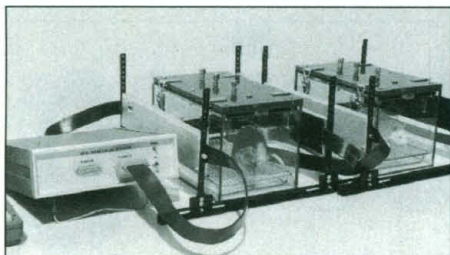
Premade Immunoblots

Ready-to-Screen Tissue BLOTS are pre-made immunoblots of proteins isolated from hard-to-obtain human and mouse tissues. They save research time otherwise spent in searching for hard-to-obtain tissues, electrophoresis, and blotting of the protein on xthe membrane. Each blot contains 75 µg protein from selected tissues. They are ready to use for probes using polyclonal, monoclonal, and peptide antibodies. **Geno Technology.** For information call 314-534-0075 or circle 141 on the Reader Service Card.

PRODUCTS

Animal Activity Meter

The Opto-Micro Animal Activity System is for measuring animal activity in multiple animal cages. The cages can be standard plastic molded home cages or large cages up to 1 m by 1 m. Up to 64 sensor pairs can be used to monitor 64 animal cages with 16 infrared (IR) beams each or to monitor 128 animal cages with 8 IR beams each. Each sensor is equipped with 8 IR emitters and 8 IR receivers spaced 1 in apart. Sensor pairs can be positioned in X, Y (horizontal), and Z (verti-



cal) directions to provide information about both horizontal and vertical animal activity. Information about IR beam interruptions by movement of animals is transferred from the sensors to a personal computer via an RS-232 link 10 times per sec. The computer computes the number of ambulatory and non-ambulatory animal movements as well as animal position along each sensor. **Columbus Instruments.** For information call 614-276-0861 or circle 142 on the Reader Service Card.

RNA Transcript Labeling Systems

Newly formatted RNA transcript labeling systems have been formulated to provide efficient labeling of RNA transcripts for use in microchip array assays, gene expression analyses, RNase protection assays, and

other nonradioactive applications. RNA probes can be labeled for use in situ hybridization assays, Southern (DNA) and Northern (RNA) blot analyses, and other hybridization procedures. Each kit contains enzymes, buffers, control templates, and a nucleotide mix. This mix provides a choice from a variety of nucleotides, including biotin-11-UTP, biotin-16-UTP, biotin-11-CTP, biotin-17-ATP, digoxigenin-11-UTP, or fluorescein-12-UTP. **Enzo Diagnostics.** For information call 800-221-7705 or circle 143 on the Reader Service Card.

Centrifuges

Microfuge 18 is a centrifuge featuring induction drive. Its easy-to-use interface allows the user to view set and actual values for rpm/rcf, and set and elapsed time. A 24-place single-row rotor handles both 1.5 and 2.0 ml tubes. The Microfuge Lite model has been upgraded with an induction drive. This 9.6-pound centrifuge delivers forces up to 12,054g with fast acceleration and deceleration times. It comes with a fixed-angle rotor that accommodates 18 each of either 1.5-ml or 1.8-ml tubes, and 400-µl tubes. **Beckman Instruments.** For information call 800-742-2345 or circle 144 on the Reader Service Card.

Specific mRNA Transcript Quantification

The RNase protection proximity assay eliminates the time-consuming gel step involved in traditional ribonuclease protection assay (RPA) technology. A single reagent is added post-RNase digestion, allowing considerable time-saving, with results available in less than 1 hour, compared with one to two days with a conventional gel method. Sensitivity is equal to or greater than traditional RPA methods, with equivalent data being obtained. It is suitable for high throughput applications, such as screening in the drug development process. **Amersham Pharmacia Biotech.** For information call +44 (0)1222 526411 or circle 145 on the Reader Service Card.

Live Cell Research Microscope

The DM LFS Microscope is for fixed stage microscope imaging systems designed for ultraviolet 340-nm fluorescence excitation, visible, and near infrared imaging for live cell

(continued on page 1961)



New from EPICENTRE!

MasterAmp™ RT-PCR Kit

**Eliminate Variability.
Improve Sensitivity.
Cut Costs.**

- Consistent.** Amplify virtually any RNA template with high yields.
- Reliable.** New RetroAmp™ RT DNA Polymerase and exclusive MasterAmp PCR Enhancement Technology* reduce RNA secondary structure interference.
- Sensitive.** Use less than 10 picograms of total cellular RNA. (Fig. 1)
- Easy.** Perform RT-PCR in one step. The single-tube system avoids cross-contamination problems.

Picograms of total RNA template



Figure 1. Amplification of human β -actin mRNA with different amounts of total human placental RNA using the MasterAmp RT-PCR Kit.

EPICENTRE TECHNOLOGIES
1202 Ann Street, Madison, WI 53713
...when you need to be sure of the quality

800-284-8474

E-mail: techhelp@epicentre.com

Website: www.epicentre.com

Outside the USA contact the distributor in your country or call 608-258-3080 or fax 608-258-3088



*Patent Pending.
MasterAmp is a trademark of Epicentre Technologies.
Epicentre's PCR products are sold under licensing arrangements with F. Hoffman-La Roche Ltd., Roche Molecular Systems, Inc. and The Perkin-Elmer Corporation. A product containing a licensed thermostable DNA polymerase is accompanied by a limited license for the customer to use it in the Polymerase Chain Reaction (PCR) and RT-PCR for life science research in conjunction with a thermal cycler whose use in the automated performance of the PCR process is covered by the up-front license fee, either by payments to Perkin-Elmer or as purchased, i.e., an authorized thermal cycler.

Circle No. 73 on Readers' Service Card

A REAL CHOICE IN TA CLONING

- ✓ **Performance**
- ✓ **Convenience**
- ✓ **Value**

T-Vectors revolutionized the efficiency and simplicity of cloning PCR products. Promega's broad range of T-Vector solutions takes PCR cloning to a new level. Our innovative T-Vector design

The broadest range of PCR cloning choices available

improves the ease of using the cloned PCR products in a wide range of applications including sequencing and mammalian expression. And the Systems are compatible with traditional, high fidelity and long PCR products.

With five T-Vector Systems available, choose the most effective solution for your application: pGEM®-T I/II or pGEM®-T Easy I/II Vector Systems for high performance PCR product cloning or the pTARGET™ System for cloning in mammalian cells. Our worldwide service and support network will accelerate your research with rapid delivery and applications assistance.



**Finally, a Real Choice for
Cloning PCR Products**

Contact your local Promega Branch Office or Distributor
for your FREE PCR-Cloning Brochure BR046
Phone 608-274-4330 or 800-356-9526



pGEM is a trademark of Promega Corporation and is registered with the U.S. Patent and Trademark Office. pTARGET is a trademark of Promega Corporation. Licensed under one or both of U.S. Pat. No. 5,487,993 and Eur. Pat. No. 0 550 693

Circle No. 51 on Readers' Service Card

Naked Truth



Charles River offers a healthy selection of immunodeficient models to help provide the truest results for all your projects. Honestly.

Charles River
LABORATORIES

Contributing to the Search for Healthier Lives™

1-800-LAB-RATS • WWW.CRIVER.COM

© Charles River Laboratories, 1998

Circle No. 47 on Readers' Service Card

Missing

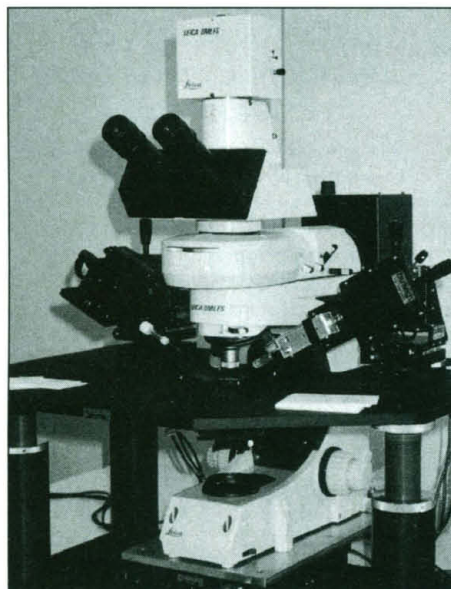
Is the Reader Service card missing from this issue of SCIENCE? Then use our new Online Reader Service to receive information on products and services advertised in this or any issue of SCIENCE. Online Reader Service requests are sent instantly via the Internet to all the companies you select. This means you receive detailed product information ... fast.

www.sciencemag.org

Go to Electronic Marketplace & select Reader Service Card.

SCIENCE
Online Reader Service

(continued from page 1959)



biomedical and plant research. The microscope features a precision-focusing nosepiece for fixed stages and provides a stable platform for patch-clamp research techniques. It offers the ability to use a wide variety of application-specific stage platforms and x-y staging solutions. Micromanipulators holding micropipettes and microelectrode probe tips are securely mounted on isolated and fixed platforms while the microscope nosepiece focuses, and the entire microscope is moved in the X and Y directions over the micromanipulator platform. A unique, multi-turreted, sealed condenser provides drainage in the event of media spillage from the drainage area. **Leica.** For information call 800-248-0123 or circle 146 on the Reader Service Card.

Desktop Distiller

This compact unit contains no complicated plumbing but provides pure distilled water and fits on the benchtop. The user simply fills it with tap water, and the unit distills one gallon of water and percolates it through a coconut shell carbon filter then stores it in a jug with dispensing spout. **Markson LabSales.** For information call 800-528-5144 or circle 147 on the Reader Service Card.

Cleavage Station

The *AccuCleave-96* Cleavage Station provides simultaneous cleavage of 96 compounds that have been synthesized on solid-phase supports. This cleavage station can be used with either Irori's *AccuTag-100* Combinatorial Chemistry Station or the automated *AutoSort-10K* System. Synthesis Manager software controls all

the systems and provides complete tracking of compound identification and archival locations. After cleavage, the cleaved compounds can be mapped into a variety of collection vial racks. The collection racks are designed around the standard microplate format. The cleavage station's valveless design eliminates the possibility of well-to-well cross contamination or leakage. All components are resistant to cleavage reagents such as trifluoroacetic acid, dichloromethane, and acetonitrile. **Irori.** For information call 619-546-1300 or circle 148 on the Reader Service Card.

Tunable Laser with Direct UV Output

The UV-Star is a solid-state, tunable laser with direct output in the ultraviolet (UV) range. The UV-Star consists of a cerium-doped LiCaAlF₆ laser pumped by a StarLine 266 frequency-quadrupled Nd:YAG laser. It can be continuously tuned over the range of 282 to 310 nm and achieves a maximum output power of more than 150 mW with a bandwidth of less than 250 pm. Output duration is 2.5 nsec at a repetition rate of up to 1 kHz. The unit's direct UV output results in a more compact, rugged, reliable, and economical method of generating tunable UV, compared with conventional approaches that rely on frequency doubling of visible lasers. **Lambda Physik.** For information call 954-486-1500 or circle 149 on the Reader Service Card.

Literature

The *Capillary Electrophoresis Knowledge Base* is an easily searchable database of capillary electrophoresis literature references. This research tool contains more than 2200 references with additions being made regularly. To assist the user in remaining current, two free updates are provided during the first year after purchase. The references can be printed in formats required by major journals and can be searched by author, title, journal, year, key word, and reference type. The disk-based system runs under Windows. **Scientific Resources.** For information call 732-542-5000 or circle 150 on the Reader Service Card.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS of any products or materials mentioned in Tech.Sight 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. Postage is free.



TRI REAGENT® Solution For TOTAL RNA ISOLATION

- total RNA with unparalleled yield and quality.
- costs less than \$1 per sample (100 mg tissue or 10⁷ cells; 0.1 – 0.8 mg of total RNA)

TRI Reagent®

- for cells and tissues

TRI Reagent®BD

- for whole blood and plasma

TRI Reagent®LS

- for liquid samples



The classic single-step method has been significantly improved to provide higher yields, a shorter protocol, and higher quality RNA from difficult sources!

In addition, TRI Reagent has made it possible to isolate simultaneously RNA, DNA and proteins.

(P.Chomczynski and K. Mackey *Anal. Biochem.* 225: 163. 1995. *Biotechniques*. 19:942. 1995.)

Isolated RNA is ready for Northern blotting, RT-PCR, and other applications.

MRC

MOLECULAR RESEARCH CENTER, INC.

5645 Montgomery Rd.
Cincinnati, OH 45212

Phone: 513-841-0900 / 888-841-0900

Fax: 513-841-0080

E-mail: info@mrcgene.com

Visit our website at:

http://www.mrcgene.com

International distributors available in the following countries: Australia, Austria, Benelux, Canada, China, France, Germany, Greece, Hong Kong, India, Indonesia, Israel, Italy, Japan, South Korea, Malaysia, Philippines, Poland, Singapore, Spain, Switzerland, Taiwan, Turkey, United Kingdom, Vietnam. See our website for information. Unlisted countries, contact MRC at the US phone: (513) 841-0900.

Circle No. 13 on Readers' Service Card



Experience The Pleasure Of Routine

Wishes come true

The **Axioskop 2** is the routine microscope you have always longed to have. Its ICS optics provide top-quality images, and its operating convenience adds extra efficiency to your work. The microscope that turns routine into a pleasure.

Fluorescence four-fold

The **Axioskop 2** is excellently equipped to provide the flexibility and optimal illumination required in fluorescence work: Reflector turret for 4 fluorescence modules, 6-place excitation filter slider, plus the power of 100 watts.

Motorized comfort

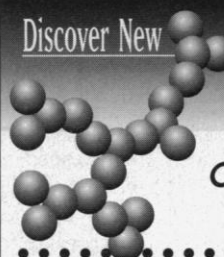
There is no need any more to memorize every detail. In the **Axioskop 2** mot, both stage focusing and universal condenser setting (including Koehler) are motorized and can be automated. Contact your Zeiss representative today for the full story.

Carl Zeiss · Microscopy · D-07740 Jena
Phone: ++49-36 41-64-1616 · Fax: ++49-36 41-64-3144
Internet: micro@zeiss.de · <http://www.zeiss.de>

ZEISS

Circle No. 65 on Readers' Service Card

Discover New Effective Drugs For Human Cancer



**The Most Direct Route
to the Clinic for your
Candidate Cancer Drug
is via MetaMouse®**

- Small molecule, protein & gene drug evaluation/development.
- The *only* clinically relevant mouse model of cancer.
- Same-organ *human* tumor transplantation to nudes or SCIDs.
- Evaluate *real* human tumors for response.
- Metastasis/Angiogenesis/Apoptosis/Growth/Invasion.
- Contract drug evaluation on all tumor models available or ship.

Examples of MetaMouse drug-discovery/development "HITS"

An, Z. et al. *Clinical and Experimental Metastasis*, 15, 184-195, 1997.
An, Z. et al. *Anticancer Research*, 16, 2546-2552, 1996.
Wang, X. et al. *Cancer Research*, 54, 4726-28, 1994.
Holzman, D. *Journal of the National Cancer Institute* 88, 396-397, 1996.
Hoffman, R., *J. Cellular biochem.* 56, 1-4, 1994.

METAMOUSE®
*The gold standard in cancer drug discovery/development

US Patent 5,491,284 and 5,569,812

Tel-(800) 511-2555 · Tel-(619) 654-2555 · Fax-(619) 268-4175 · E-Mail: alla@anticancer.com
USA/Canada <http://www.anticancer.com>

7917 Ostrow Street **ANTICANCER INCORPORATED** San Diego, CA 92111, USA

Circle No. 30 on Readers' Service Card



EurekaAlert!

**The Web site
for research news.**

Check it out at

<http://www.eurekaalert.org>

For more information, call the AAAS News & Information Office at 202-326-6440. Or send a message to webmaster@eurekaalert.org.



AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE

DISPLAY CLASSIFIED ADVERTISEMENTS

Call for rate and deadline information on display classified advertisements.

E-mail: science_displayads@aaas.org

Bren Peters
Recruitment Display Advertising
Telephone: (202) 326-6541
FAX: (202) 289-6742
E-mail: science_displayads@aaas.org

Gabrielle Boguslawski
Recruitment Advertising Sales Manager
Telephone: (718) 491-1607
FAX: (202) 289-6742

Debbie Cummings
European Recruitment Advertising
Telephone: +44 (0) 1223 302067
FAX: +44 (0) 1223 576208
E-mail: european_ads@science-int.co.uk

LINE CLASSIFIED ADVERTISEMENTS

How to Submit a Line Classified Ad:

Send your ad text to: e-mail: science_classifieds@aaas.org; fax: (202) 289-6742. You must include your telephone number, billing address, and purchase order number in your e-mail or fax. Do not bold, italicize, or abbreviate any words. SCIENCE will edit and typeset ads according to SCIENCE style. **SCIENCE cannot provide proofs of typeset line ads.** Available categories: Positions Open, Meetings, Announcements, and Courses and Training. Line advertisements are not commissionable.

Estimates: SCIENCE will provide a cost estimate for line ads. **This is an approximate cost only.** Purchase orders must allow for variation between estimated lines and actual typeset lines and resulting final cost.

For line advertising deadlines, call Eric Banks, Telephone: (202) 326-6555; or Troy Benitez, Telephone: (202) 326-6740; FAX: (202) 289-6742. E-mail: science_classifieds@aaas.org

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.

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

Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Debbie Cummings. Telephone: +44(0) 1223 302067; FAX: +44(0) 1223 576208.

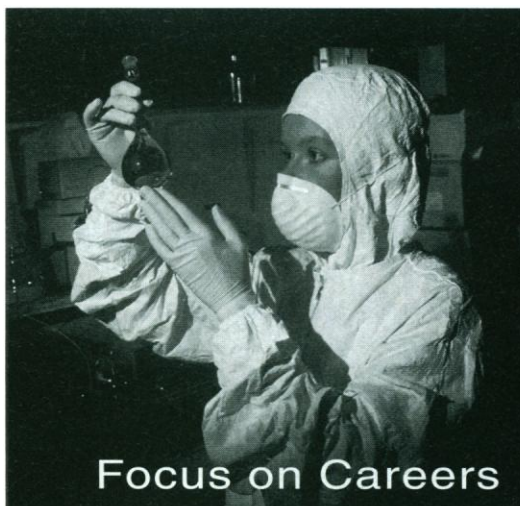
SCIENCE Professional Network: Unless otherwise instructed, all classified advertisements submitted for publication in SCIENCE are automatically posted on SCIENCE's online classified advertising service, SCIENCE Professional Network, at no additional charge.
www.sciencemag.org

Mail, FAX or E-mail materials to:

SCIENCE Classified Advertising
1200 New York Avenue, N.W., Room 911
Washington, DC 20005
FAX: 202-289-6742

E-mail: science_classifieds@aaas.org (please include your telephone number in e-mail)

SCIENCE reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.



Focus on Careers

**ADVERTISEMENT
DIRECTORY
CAREERS
SUPPLEMENT**

SCANDINAVIA

The following organizations have placed recruitment advertisements in the special advertising supplement in this issue beginning on page 1963.

ADVERTISER

PAGE

H. Lundbeck A/S 1966-1967

Karolinska Institute—
Department of Biosciences
at Novum 1968

Karolinska Institute—
Department of Neuroscience 1968

MIC, Mikroelektronik Centret _ 1965

Pharmacia & Upjohn—
Karolinska Institute Center
for Genomics Research 1969

The Technical University of
Denmark (DTU) 1965

Focus on Careers SCANDINAVIA

by Peter Gwynne

Life Scientists' Careers in Scandinavia

Like other regions in Europe, Scandinavia is awakening fast to the value of industry based on life science. The region has long had its share of prominent pharmaceutical companies. Now, they are being joined by a growing biotechnology industry.

A major focus of Scandinavia's commercial life science is the region that locals call the Medicon Valley. This starts in greater Copenhagen, jumps across the Kattegat to Malmö, and then moves northeast along Sweden's Baltic coast as far as Stockholm. It contains the headquarters of such pharmaceutical giants as Astra, Novo Nordisk, and Pharmacia Upjohn.

The life science link between the two countries will soon become stronger: a bridge will join Copenhagen to the Swedish mainland by the year 2000. Less visible connections being forged across the sound also promise to advance bioscience in the Valley. Denmark's Copenhagen University and Sweden's Lund University, for example, are collaborating on bioscience projects with each other and with companies in both countries. The Copenhagen and Stockholm stock exchanges have started to cooperate, creating an investment environment that encourages growth in Scandinavia's fledgling bioscience industry.

To take maximum advantage of that environment, the industry needs more qualified scientists. Scandinavia's universities have little history of collaborating with industry. However, governments (notably Sweden's) are paying increased attention to this "third task" of academia-industry cooperation. Here, representatives of two institutions in the Medicon Valley discuss the progress of such initiatives on careers in Scandinavian bioscience.



Søren Mouritsen

Hørsholm, Denmark: "We could have many more companies in this area compared with what we have," says Søren Mouritsen, founder and CEO of M&E Biotech. "The bottleneck is universities' traditional inability to transfer technologies to industry." Local universities are also failing to produce enough individual talent for Mouritsen. "We have difficulties trying to get scientists in this area," he says. "We would like to see the universities produce more, particularly postdocs."

Mouritsen sees some cause for hope. "In the past year, there has been a tremendous growth in universities' interest in collaborating with industry," he says. His company now has cooperative projects with universities in Copenhagen and Stockholm, as well as London's Imperial College and Kennedy Institute and Australia's Canberra University.

M&E has little trouble recruiting immunologists locally; the region has historic strength in that field. Local research in biotechnology is appreciably weaker, forcing M&E to recruit abroad. The company's 24 scientists include three Americans, one Australian, and one Briton.

Mouritsen seeks a range of high achievers. "We are a vaccine company, and have many technologies — protein expression, recombinant

DNA, animal models," he explains. "We look for excellent science and good teamwork skills. About half our scientists have at least three or four postdoctoral periods behind them. After that, they love to come to somewhere where they have a common goal." And language presents no barrier. "All Scandinavians speak English, as well as German and some French," Mouritsen declares.

South Stockholm, Sweden: Södertörns högskola (University College) has grown from 1,000 students and 50 staff when it opened in August, 1996, to 5,000 students and 300 staff this coming fall. The institution, which will become a full-fledged university in 2003, has goals beyond rapid growth. "We are setting up a supporting association of many companies and local authorities in the area, which will build bridges between us and them," says Inger Porsch-Hällström, supervisor of the college's natural sciences study program. "A lot of students are getting summer jobs and career contacts through this association."

The college's location helps. It shares a campus with part of the Karolinska Institute, next to a research park in which companies such as Astra and Karo Bio carry out biomedical research. "The companies have chosen to take advantage of collaborative opportunities," says Porsch-Hällström. "We are contributing to life science on the campus and trying to develop our own profile. Sweden lacks a center for research on eukaryotic genetic model organisms. We hope that South Stockholm will do that."

In the immediate future, Porsch-Hällström wants to attract good students into the college's life science programs. Having started with local recruits, the college will welcome students from overseas in the fall. Porsch-Hällström notes that the college is a suitable destination for individuals in graduate science programs that require a semester abroad, and that courses will be given in English if necessary. She guesses that, in a few years, the institution could take in 100 to 200 overseas students, about 10 to 20 percent of its total enrollment.

Peter Gwynne writes on a wide range of scientific and technological subjects.

Nordic Numbers

Scandinavian pharmaceuticals and biotechnology are on the verge of significant growth. In 1994, the latest year for which figures are available, Denmark and Sweden were, respectively, numbers 4 and 5 on the global list of pharmaceuticals exports per capita. The table below shows the numbers of pharmaceutical and biotechnology companies, and of scientifically trained employees working for those companies, in three Scandinavian nations:

Country	No. of companies	Scientifically trained employees
Sweden	400	7,000
Denmark	36	4,000
Norway	17	1,500

Figures courtesy of Birgitte Thygesen, Copenhagen Capacity, Denmark



Inger Porsch-Hällström



Communication, Optics
and Materials

DIRECTOR

The Center for Communication, Optics and Materials (COM Center) at the Technical University of Denmark (DTU) is established with the objective of promoting Danish research and education within materials, components, systems and networks for optical telecommunications.

The COM Center focuses on a strong vertical integration of research activities in close collaboration with Danish industry.

The COM Center has processing and laboratory facilities of international class at its disposal.

www.com.emi.dtu.dk

Applications are invited for the position of Director at the recently established Center for Communication, Optics and Materials (COM Center) at the Technical University of Denmark (DTU).

The Director is responsible for the daily management of the center's research, education and industrial collaborations, and will report to the Board of Directors, which has the overall responsibility for the Center. The Director will be assisted by a Vice director, who will be employed at the recommendation of the Director.

The Director will inspire and motivate a dynamic staff of about 60 scientific, technical and administrative employees, many of whom will be recruited from Mikroelektronik Centret (MIC) and the Center for Broadband Telecommunications (CBT), both based at DTU.

The Director will develop extensive collaborations with Danish industry as well as Danish and international research institutions. The Director will operate successfully within the Danish national research system, as well as collaborate closely with DTU's management and with other DTU institutes, in particular with MIC concerning shared process facilities.

The successful candidate will document a solid scientific background, experience in research management at a high level, and a well-established international reputation.

The candidate will demonstrate significant creativity and decision-making skills. The candidate should also possess a thorough understanding of the needs of industry, in order to ensure effective transfer of technology to industry.

The appointment is initially for a period of 5 years. Gross annual salary is in the vicinity of DKK 700,000, subject to final approval of the position by the Danish Ministry of Finance.

For further information about the position and the COM Center's objectives and construction please contact the Chairman of the Board, Kaj Juul-Pedersen, President of Telia A/S, direct tel. +45 8831 5646.

Applications will be handled confidentially and should arrive no later than Monday August 3rd, 1998, at 4pm.

Please send applications to:
Rector Hans Peter Jensen
The Technical University of Denmark
Administration, Building 101A
DK-2800 Lyngby, Denmark



PH.D. STUDENTS AND POSTDOCTORAL FELLOWS IN MICROSYSTEM TECHNOLOGY

The Group

The Bio/Chemical MicroSystems Group at Mikroelektronik Centret (MIC) is a multidisciplinary group applying microsystem technology to biotechnology, medical diagnostics and analytical chemistry. The group consists of physicists, engineers, chemists, and biologists and has access to a state-of-the-art process laboratory, optical and bio/chemical laboratories.

The Positions

Positions are now available for Ph.D. students and Postdoctoral Associates for periods up to 3 years to work on a BRITE/EURAM project aiming at the development of a Microscale Total Analytical System (μ TAS) for in situ monitoring and process control of waste water, recipients and drinking water. Areas of research include development of microfluidic systems, optical detection systems, protective coatings, and polymer microstructures.

Applicants

The successful candidates will have a broad-based background and extensive knowledge in one or more of the following areas: fabrication of microsystems, optics, material sciences (silicon and/or polymer based), or analytical chemistry.

Information and application

For further information please contact Group Leader Pieter Telleman, direct tel. +45 4525 6303, email pt@mic.dtu.dk.

Application including C.V., two letters of recommendation, and a brief statement of research interests, should arrive no later than August 3rd, 1998, at:



MIC, Mikroelektronik Centret
DTU, Building 345east
DK-2800 Lyngby, Denmark



See also www.mic.dtu.dk/mic

Mikroelektronik Centret (MIC) which is affiliated to the Technical University of Denmark (DTU) is a national research center for advanced microtechnologies in semiconductor materials with about 100 employees. Within this field, MIC is committed to educating scientists and engineers, conducting research on an internationally competitive level and transferring new technologies to Danish industry through joint programmes. MIC operates a state-of-the-art silicon process facility and well-developed characterization laboratories.



We have a clear vision. We want to become the world leader within research and development of integrated treatment concepts of psychiatric and neurological diseases. To achieve this goal, we must be better than our competitors in all areas. Thus, it is very important that we continuously manage to attract the absolutely best-qualified employees.

Medicinal Chemistry Research Division

We are looking for experienced research chemists for two vacancies within our Medicinal Chemistry Research Division. The Division is part of Lundbeck's research organisation. The overall goal of the Division is to prepare new compounds with therapeutic potential against diseases in the central nervous system. The Division is provided with state-of-the-art equipment including chromatography, high field NMR as well as LC-MS spectroscopy and synthesis robots. Both jobs call for chemists with a PhD, in medicinal chemistry or organic chemical synthesis combined with creativity, inventiveness and a fair amount of critically analytic sense. Experience and skill in practical organic synthesis are expected as well as documented original research results in form of scientific publications or other kinds of presentations. Post-doctoral experience from industrial or academic positions is an advantage.

Medicinal Chemist Department of Medicinal Chemistry

The primary responsibility of the Department of Medicinal Chemistry is to synthesize new organic chemical compounds. You are a research chemist with an interest in all aspects of medicinal chemistry. This includes design of new compounds via analysis of structure-activity relationships using chemical and biological information data-banks and molecular modelling, as well as organic chemical synthesis of the designed compounds using modern synthetic methods.

For further information please contact Dr. Ejner K. Moltzen, Head of Department, on telephone number +45 36 30 13 11, ext. 3213 or e-mail: ekm@lundbeck.com. Please mark your application "Medicinal Chemist". Applications must be received before 1 July 1998.

Combinatorial Chemist Department of Combinatorial Chemistry

The primary responsibility of the Department of Combinatorial Chemistry is to synthesize combinatorial libraries of new organic chemical compounds. You are a research chemist interested in all aspects of non-peptide combinatorial chemistry. This includes development of library synthesis methods by solution and solid phase synthesis, development and imple-

mentation of automated technologies for library synthesis and design of new libraries in close collaboration with chemists specialised in medicinal and computational chemistry.

For further information please contact Dr. Kim Andersen, Head of Department, on telephone number +45 36 30 13 11, ext. 3253 or e-mail: kia@lundbeck.com. Please mark your application "Combinatorial Chemist". Applications must be received before 1 July 1998.

Pharmacological Research Division

We are looking for experienced research scientists for four vacancies in our Pharmacological Research Division. The Psychopharmacology Department is responsible for in vivo characterisation of lead compounds in behavioural pharmacology and electrophysiological models within Lundbeck's research areas. Furthermore, the department attempts to develop new and further improve existing pathophysiological animal models for psychiatric and neurological diseases. The Department is well-equipped with automated set-ups for a variety of CNS pharmacological models. The Neuropharmacology Screening Department is responsible for the early in vivo screening of new chemical entities and for the basic CNS side effect studies. The Neurobiology Department is responsible for evaluating new targets for drug discovery and developing techniques aimed at characterising new relevant chemical entities at the cellular and molecular level.

Psychopharmacologist Psychopharmacology Department

We now have an opening for a scientist with a solid background in behavioural pharmacology. It is the intention that the candidate will be assigned with psychosis research tasks, but we prefer candidates who are flexible as regards research capabilities and interests. We emphasise the need for good interpersonal skills, ability to function in goal-oriented teams and good communication ability. The initial period for employment runs for 2-3 years with possibility of prolongation. The successful applicant has documented experience in psychopharmacology, at least at PhD. level, and preferably some post-doctoral and/or industrial research experience as well.

For further information please contact Dr. Jørn Arnt, Head of Department, on telephone number +45 36 30 13 11, ext. 2524 or e-mail: ja@lundbeck.com. Please mark your application "Psychopharmacologist". Applications must be received before 27 July 1998.

Pharmacologist Neuropharmacology Screening Department

A position is open in the Neuropharmacology Screening Department. The department is responsible for in vivo characterisation of new chemical entities. The drug candidates are characterized by means of a broad range of animal model relevant to receptor mechanisms and behavioural screening models of relevance for anxiolytic, antidepressant, antipsychotic and anti-convulsant activities, etc. The successful candidate will have a PhD. or a similar degree in neuropharmacology or behavioural pharmacology and preferably experienced in the drug discovery process. The successful candidate will participate actively in the drug discovery process in a multidisciplinary research team.

For further information please contact Dr. Connie Sánchez, Head of Department, on telephone number +45 36 30 13 11, ext. 2517 or e-mail: cs@lundbeck.com. Please mark your application "Pharmacologist". Applications must be received before 27 July 1998.

Neuro Scientists Neurobiology Department

We now have two openings for Scientists at different levels to carry out research in the Neuroscience area. The work includes design, execution, and analysis of studies focused on exploring and evaluating molecular targets for intervention in central nervous system diseases.

The successful applicants for our senior position will have a proven track record and a PhD. within one of the following fields: cell biology, neurobiology or protein chemistry (some years of post-doctoral experience would be beneficial), and will join a dynamic, well equipped and well resourced group using multidisciplinary approaches to understand receptor pharmacology, signal transduction and protein-protein interaction. In addition the successful applicants will have experience in cell biology related to one or more of the following areas: gene cloning, expression systems, differential displays, sequencing, PCR and Northern blotting. Experience in tissue culture would be a plus.

Applicants for the junior position must hold a PhD. or a similar degree in an academic or industrial environment and a solid background in neurobiology.

For further information on both positions please contact Dr. Jens D. Mikkelsen, Head of Department on e-mail: jdm@lundbeck.com. Please mark your application "Neuro Scientist -Senior" or "Neuro Scientist -Junior". Applications must be received before 1 August 1998.

International Clinical Research Division

Biostatistician Biostatistics Department

For a vacant position in our Biostatistics Department we are looking for a masters or doctoral level statistician/biostatistician. Through the departments specialised services in statistics, this department contributes to the fast and competent accomplishment of the Lundbeck R&D programs. The current staff includes 5 biostatisticians. Your primary responsibility will be to plan, analyse and report on non-clinical as well as clinical studies in cooperation with researchers and other specialists. This is a task which

requires an expertise in experimental design, statistical modelling, analysing and interpreting study data and keeping posted with current issues and practises within pharmaceutical R&D. The job will also entail exploratory statistical modelling and mathematical simulation of various research data, including data relating to health economics.

Your background is a PhD. or a MA in Statistics or Biostatistics. You should have a strong interest in applications, excellent verbal and written communication skills as well as a sense of humour and an ability to work effectively in a team. Working experience gained in the pharmaceutical industry or consulting experience in an industrial or academic setting are highly desirable. Programming experience and familiarity with statistics is a prerequisite.

For further information on the position please contact Dr. Per Tanghøj, Head of Department on telephone number +45 36 30 13 11, ext. 2812 or e-mail: pet@lundbeck.com. Please mark your application "Biostatistician". Applications must be received before 1 August 1998.

Our advantages

We can offer challenging jobs in an inspiring international environment as well as an attractive relocation and compensation package. 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 successful candidates will organise, present and defend data in a group setting. All positions within R&D are located at our head office in Copenhagen, Denmark.

Potential job opportunities

If you are a scientist within a different R&D area than those relating to the job openings above and should you feel attracted by the favourable opportunities available to our employees within the R&D area, you shall be very welcome to send us your CV. In the near future we will be looking for new employees within areas such as pharmacokinetics/-dynamics and preformulation & analytical development.

Your application

Please send or fax your application, specifying the preferred job-title, and a complete CV to: Personnel Department. Telefax No +45 36 30 34 82.

H. Lundbeck A/S is a Danish pharmaceutical research company owned by the Lundbeck Foundation. Our production activities are located in Denmark and England where we produce pharmaceuticals for the treatment of psychiatric and neurological diseases. Our products are marketed world-wide, either through our own subsidiaries and representation offices or through license holders and distributors. 95 per cent of sales - which are expected to exceed DKK 3 bill in 1998 - are ascribable to exports. H. Lundbeck A/S employs a total of 2.200 people of which 1,200 are employed in Denmark.

H. Lundbeck A/S
9, Ottiliavej
2500 Valby
DK-Copenhagen
Phone +45 36 30 13 11



H. Lundbeck A/S
Specialists in psychiatry, pioneers in neurology



KAROLINSKA INSTITUTET Department of Biosciences at Novum

Postdoctoral positions— Functional studies of components in the SHH- PTCH signalling pathway

Postdoctoral positions are available to work on functional characterization of components in the SHH-PTCH signalling pathway. Disruption of SHH-PTCH signalling plays an essential role in several different cancer forms and the goal is to understand the role of this pathway during tumor development and in normal adult tissues.

Preference is given to applicants with experience in cell and molecular biology, gene targeting, and/or signal transduction. The positions are initially for 2 years.

Application including CV, relevant publications, and letters of recommendation should be sent to:

**Professor Rune Toftgård, Karolinska Institutet
Department of Biosciences at Novum, S-141 57
Huddinge, Sweden.**

Telephone: +46-8-608 91 52; Fax +46-8-608 15 01

E-mail: Rune.Toftgard@cnt.ki.se.

Please quote ref. no. 53021/32

Closing date: August 15, 1998.

Make SCIENCE Your International Recruitment Partner.

Upcoming European Bonus Distributions

► FRANCE 3 July Issue

To 8th International
Congress of Toxicology
5-8 July, Paris, France
Booking Deadline: 16 June

► GERMANY 24 July Issue

To Internat. Congress
of Pharmacology
26-31 July
Munich, Germany
Booking Deadline: 7 July

► SWEDEN 7 Aug. Issue

To European Assoc.
for Cancer Research
15-19 August
Stockholm, Sweden
Booking Deadline: 21 July

► SWEDEN 14 Aug. Issue

Careers Supplement:
*BSc&MSc Careers and
Graduate Programmes*

To 31 UK and
European Universities
Booking Deadline: 28 July

► AUSTRIA 21 Aug. Issue

To European Society
for Cardiology
23-27 July
Vienna, Austria
Booking Deadline: 4 August

To book your ad, ring DEBBIE CUMMINGS on

Phone: +44 (0)1223 302067

Fax: +44 (0)1223 576208

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

SCIENCE
www.sciencemag.org



POSTDOCTORAL FELLOWSHIP

Molecular Neurobiology Lab seeks Experienced Cell/Molecular Biologists

Postdoctoral positions are open at the Division of Molecular Neurobiology, Department of Neuroscience, Karolinska Institute, Stockholm.

We are looking for experienced cell/molecular biologists to join our team investigating structural and functional aspects of neurotrophic factor signaling in the nervous system. Areas of immediate interest include: ligand-receptor interactions, structure-function relationships, intracellular signaling, expression-cloning of novel ligands and receptors, functional studies in transgenic mice, cell-specific/inducible gene targeting.

Funding is available for an initial period of two years, starting Fall 1998. Application, including CV, list of publications, and two letters of reference, should be sent to **Professor Carlos F. Ibáñez, Karolinska Institute, Department of Neuroscience, Division of Molecular Neurobiology, Doktorsträngen 12, 171 77 Stockholm, Sweden.** Telephone: 46-8-7287660; Fax: 46-8-341960; E-mail: carlos@cajal.mbb.ki.se.

Additional information can be found at <http://cajal.mbb.ki.se>. Deadline for submission of applications is August 31, 1998.

Open Doors

Can't get in?

SCIENCE Professional Network can help you open doors with the most complete and searchable database of career opportunities.

www.sciencemag.org

Select SCIENCE Professional Network

SCIENCE
PROFESSIONAL
NETWORK



Pay in Pounds...

As a service to our advertisers abroad, SCIENCE has established rate cards for both pounds sterling and yen. Please contact your SCIENCE representative for details, and to place your recruitment advertisement.

In Europe:

phone: +44 (0) 1223 302 067,
fax: +44 (0) 1223 576 208

E-mail:

european_ads@science-int.co.uk

In Japan:

phone: +81 3 3235-5961,
fax: +81 3 3235-5852

In Australia:

phone: +61 02 922 2977,
fax: +61 02 922 1100

In the U.S.:

phone: (202) 326-6541,
fax: (202) 682-0816.

SCIENCE
www.sciencemag.org

Center for Genomics Research

(CGR, Karolinska Institute*, Stockholm)

Principal Scientists/Faculty Members/Group Leaders

In mid-1997, the most extensive university-industry collaboration in Sweden was announced. At that time, Pharmacia & Upjohn agreed to support a new Center for Genomics Research at Karolinska Institute* in Stockholm. This new Center has recently gained Departmental status at Karolinska Institute and has secured significant laboratory space. In addition to the Center itself, collaborations with leading preclinical as well as clinical research groups throughout the Karolinska Institute are currently being established.

At this time we are soliciting applications to fill a few remaining positions, at any academic level, at the Center for Genomics Research (CGR). Employment at the Stockholm research campus of Pharmacia & Upjohn, located adjacent to the Karolinska Institute, is also possible.

Desired areas of expertise include genomics

technologies, functional genomics, pharmaco genomics, bio informatics and genetics.

Specific post to fill in area of DNA Chip Technology.

Especially accomplished applicants will be considered for position as Unit Head of appropriate genomics sub-disciplines and would thus potentially coordinate the efforts of several research groups.

Junior scientists are also encouraged to apply for junior faculty or post-doctoral positions. Letters of interest and Curriculum Vitae may be directed to:

Prof. Claes Wahlestedt, Director, Center for Genomics Research.
KAROLINSKA INSTITUTET
SE-171 77 Stockholm, Sweden
Fax: +46 8 32 39 50
e-mail: claes.wahlestedt@cgr.ki.se

Postdoctoral Stipends, Graduate Student Stipends and a Research Engineer Position are currently available in the Laboratory of Dr. Harold Swerdlow.

Individuals are needed to help develop chip-based and other novel methods and instrumentation for finding and characterizing (disease) genes. An interdisciplinary background or interest is desired, e.g. analytical chemistry and biology, or engineering and chemistry. Applicants must be able to think creatively and function independently. For more information see:
<http://www.genome.utah.edu/cap>.

Applications should be received by July 15:th, 1998.

To apply, please include Resume or CV, reprints of relevant publications, and a short description of your current and future research interests and direct these documents to:

Dr. Harold Swerdlow, Center for Genomics Research
KAROLINSKA INSTITUTET
SE-171 77 Stockholm, Sweden
Fax: +46 8 32 39 50
e-mail: Harold.Swerdlow@genetics.utah.edu



**Pharmacia
& Upjohn**

**Karolinska Institutet, KI, is a medical university having extensive international co-operation. KI has approximately 3,000 employees and 8,000 students of which 1,600 are Ph.D. candidates. The turnover during 1998 is estimated to 2.2 billion Swedish crowns.*



Lilly Research

Laboratories need

to increase capa-

city and critical

skills in Toxicology

& Drug Metabolism

in Europe to take

up the challenge

of early evaluation

and development

of new drug sub-

stances and are

now looking for

(m/f) :

Toxicologist

This position requires a Ph.D. in toxicology or biological sciences. The applicant must have at least 5 years experience in toxicology and drug development.

Bioanalytical Chemist

This position requires a Ph.D. with a very strong background in bioanalysis, separation techniques and quantitative mass spectrometry as well as at least 5 years experience in the field.

The incumbent will have responsibilities in the scientific supervision of a bioanalytical team and in assay method development. Excellent interpersonal skills are essential.

Drug Metabolism Scientist

This position requires a Ph.D. in a field related to drug disposition and metabolism of xenobiotics, with a degree in chemistry, biochemistry, pharmacy or equivalent.

The incumbent will conduct *in vivo* and *in vitro* studies. This will involve identification of drug metabolizing enzymes and interaction studies. A strong background in separation techniques is required and knowledge in mass spectrometry will be an asset.

ADME Scientist

This position requires a Ph.D. in pharmacy or biological sciences and 5 years experience in preclinical drug metabolism and pharmacokinetics.

The incumbent will be responsible for pharmacokinetic and toxicokinetic studies using both unlabeled and radiolabeled compounds. The position will involve development and validation of animal models in support of compound development according to program plans.

The Scientists will be part of the Toxicology & Drug Metabolism Department at Lilly's Research & Development facility near Louvain-la-Neuve in Belgium.

Candidates have excellent social communication skills at both local and international levels as well as a good knowledge of spoken and written English.

Candidates can apply by sending a curriculum vitae to Thérèse Lerot, Human Resources Department, Lilly Development Center, Parc Scientifique de Louvain-la-Neuve, 11 rue Granbonpré, B-1348 Mont-Saint-Guibert, Belgium.

The Lilly logo is written in a large, elegant, black cursive script. The letters are fluid and interconnected, with a prominent 'L' and 'y'.

Lilly Research

Laboratories need

to increase capa-

city and critical

skills in Toxicology

& Drug Metabolism

in Europe to take

up the challenge

of early evaluation

and development

of new drug sub-

stances and are

now looking for

(m/f) :

Toxicologist

This position requires a Ph.D. in toxicology or biological sciences. The applicant must have at least 5 years experience in toxicology and drug development.

Bioanalytical Chemist

This position requires a Ph.D. with a very strong background in bioanalysis, separation techniques and quantitative mass spectrometry as well as at least 5 years experience in the field.

The incumbent will have responsibilities in the scientific supervision of a bioanalytical team and in assay method development. Excellent interpersonal skills are essential.

Drug Metabolism Scientist

This position requires a Ph.D. in a field related to drug disposition and metabolism of xenobiotics, with a degree in chemistry, biochemistry, pharmacy or equivalent.

The incumbent will conduct *in vivo* and *in vitro* studies. This will involve identification of drug metabolizing enzymes and interaction studies. A strong background in separation techniques is required and knowledge in mass spectrometry will be an asset.

ADME Scientist

This position requires a Ph.D. in pharmacy or biological sciences and 5 years experience in preclinical drug metabolism and pharmacokinetics.

The incumbent will be responsible for pharmacokinetic and toxicokinetic studies using both unlabeled and radiolabeled compounds. The position will involve development and validation of animal models in support of compound development according to program plans.

The Scientists will be part of the Toxicology & Drug Metabolism Department at Lilly's Research & Development facility near Louvain-la-Neuve in Belgium.

Candidates have excellent social communication skills at both local and international levels as well as a good knowledge of spoken and written English.

Candidates can apply by sending a curriculum vitae to Thérèse Lerot, Human Resources Department, Lilly Development Center, Parc Scientifique de Louvain-la-Neuve, 11 rue Granbonpré, B-1348 Mont-Saint-Guibert, Belgium.

Lilly



**University of Alberta
Edmonton**

Chair in Fisheries and Wildlife

**Alberta Conservation
Association**



The Department of Biological Sciences in the Faculty of Science invites applications for the Alberta Conservation Association Chair in Fisheries and Wildlife.

Candidates must have an outstanding internationally recognized record of achievement in research in some aspect of fisheries and/or wildlife biology. The Chairholder will be expected to provide leadership for a major research and teaching program in applied fisheries and wildlife biology, in support of the goals of the Alberta Conservation Association for a long-term sustainable resource in Alberta. The program will be diverse but will include examination of the ecological and socio-economic role of consumptive use of natural resources as a fisheries and wildlife management tool.

Appointment will be at the level of Full Professor, adding to our already strong ecology and environmental biology research groups. The effective date of employment will be January 1, 1999 or as soon as possible thereafter.

Candidates should forward a curriculum vitae, list of publications, a brief statement of research interests and the names of three referees to:

Dr. S.E. Jensen, Chair
Department of Biological Sciences
CW 405 Biological Sciences Building
University of Alberta
Edmonton, Alberta, Canada T6G 2E9
E-mail: susan.jensen@ualberta.ca
For additional information about
the Department see: www.biology.ualberta.ca

Closing Date: October 15, 1998

The University of Alberta is committed to the principle of equity in employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.

...it makes sense.

UNIVERSITY OF ALBERTA



Epidemiologist - Neuroendocrinology Centers for Disease Control & Prevention National Center for Infectious Diseases Division of Viral & Rickettsial Diseases

The Centers for Disease Control & Prevention, Viral Exanthems & Herpesvirus Branch, seeks an outstanding scientist with research interests in the neuroendocrine system's influence on chronic, psychiatric, and infectious disease states. The individual will be part of a multidisciplinary Chronic Fatigue Syndrome (CFS) Research Program and will share responsibility for developing epidemiology and clinical field studies, which are coordinated with the Program's Molecular Epidemiology Laboratory. The person in this position will provide the CFS Program with innovation in the conception, planning, and execution of epidemiologic research involving fatiguing illness, with particular focus on CFS and Gulf War illness.

Qualifications include an M.D. with a subspecialty in neurology or endocrinology, with appropriate postgraduate training in behavioral research and epidemiology; an M.D. with a subspecialty in psychiatry, with appropriate postgraduate training in endocrinology and epidemiology; a Ph.D. in psychology or another relevant field with appropriate postgraduate training in neurology, endocrinology, or epidemiology or equivalent training and research experience. Candidates will be evaluated based on (1) professional knowledge of current facts and theory in neuroendocrinology, psychiatry, molecular epidemiology, immunology, and stress physiology as related to chronically fatiguing illnesses; (2) ability to utilize epidemiological, biostatistical, and laboratory methods to design, manage, and evaluate epidemiology research programs involving stress, neuroendocrinology, clinical psychology, and chronic illnesses associated with fatigue; (3) written communication abilities; (4) oral communication abilities; and (5) skills in leading multidisciplinary epidemiology, statistical, and laboratory research programs.

The position will be an initial two year Research Fellow appointment. Annual salary range from \$55,400-\$85,104 depending on qualifications.

Interested applicants should send their CV and names of three references (including the current supervisor) by July 31 to **Ms. Janie L. Oddy, Human Resources Management Office, Centers for Disease Control & Prevention, 1600 Clifton Rd., NE (C-12), Atlanta, GA 30341-3724. E-mail: jlo0@cdc.gov.**



EPIDEMIOLOGIST - HPV/Cervical Cancer Division of Viral & Rickettsial Diseases National Center for Infectious Diseases Centers for Disease Control & Prevention

The Centers for Disease Control & Prevention is seeking qualified applicants for an Epidemiologist position in the Viral Exanthems & Herpesvirus Branch, Division of Viral & Rickettsial Diseases. The incumbent will function as a key member of a multidisciplinary scientific team responsible for the development, implementation, and evaluation of novel laboratory-based epidemiologic research studies. This research includes identifying factors applicable to the etiology, diagnosis, therapy, and conduct of molecular epidemiologic studies of cervical cancer and HPV.

Qualifications include outstanding scientific credentials; experience and certification in oncology, OB/GYN, pathology, or epidemiology; and proven ability to engage in original laboratory-based epidemiologic research with other scientists. A medical degree or advanced degree (Ph.D., Sc.D., or other) in epidemiology is required. Candidates will be evaluated based on (1) professional knowledge of current facts and theory in cervical cancer, molecular epidemiology of HPV, immunology of HPV, and molecular biology of HPV; (2) ability to utilize epidemiological, biostatistical, and laboratory methods to design, manage, and evaluate epidemiology research programs involving HPV and cervical disease; (3) written communication abilities; (4) oral communication abilities; and (5) skills in leading multidisciplinary epidemiology, statistical, and laboratory research programs.

The position will be an initial two-year Research Fellow appointment. Annual salary range from \$55,400-\$85,104 depending on qualifications.

Interested applicants should send their CV and names of three references (including the current supervisor) by July 31 to **Ms. Janie L. Oddy, Human Resources Management Office, Centers for Disease Control & Prevention, 1600 Clifton Rd., NE (C-12), Atlanta, GA 30341-3724. E-mail: jlo0@cdc.gov.**

NEED HUMAN SPECIMENS FOR RESEARCH?

The NCI Cooperative Human Tissue Network (CHTN)

provides normal, benign, pre-cancerous and cancerous human tissue to the scientific community for basic and developmental studies in many areas of cancer research. Contact the CHTN website at:

<http://www-chn.ims.nci.nih.gov>, or Ms. Marianna Bledsoe, NCI, (301) 496-7147; e-mail: mb80s@nih.gov.

The NCI AIDS Malignancy Bank (AMB)

is a collection of tissue and biological fluids with associated clinical and follow-up data from patients with HIV-related malignancies. The specimens and clinical data are available for research studies, particularly those that translate basic research findings to clinical application. Contact the AMB website at: <http://cancernet.nci.nih.gov/amb/amb.html>, or Dr. Ellen Feigal, NCI, (301) 496-6711; e-mail: ef30d@nih.gov.



The Cooperative Family Registry for Breast Cancer Studies (CFRBCS)

provides biological specimens with associated family history, clinical, demographic and epidemiologic data from participants with a family history of breast cancer, breast/ovarian cancer, or Li-Fraumeni syndrome, and their relatives. The CFRBCS's repository is particularly suited to support interdisciplinary and translational breast cancer research. Contact the CFRBCS website at: <http://www-dceg.ims.nci.nih.gov/cfrbcs>, or Dr. Daniela Seminara, NCI, (301) 496-9600; e-mail: seminard@epndce.nci.nih.gov.

The NCI Cooperative Breast Cancer Tissue Resource (CBCTR)

can provide researchers with access to approximately 8,000 cases of formalin-fixed, paraffin-embedded primary breast cancer specimens, with associated pathology and clinical data. The collection is particularly well-suited for validation studies of diagnostic and prognostic markers. Contact CBCTR's website at: <http://www-cbctr.ims.nci.nih.gov>, or Ms. Sherrill Long, Information Management Services, Inc., (301) 680-9770; e-mail: sherrill@ims.nci.nih.gov.

The Gynecologic Oncology Group (GOG) Tissue Bank

can provide malignant, benign, and normal ovarian, and cervical tissue with associated clinical information. The bank was established to provide carefully preserved specimens needed for molecular biology studies of gynecologic tumors. Contact the GOG Tissue Bank, Children's Hospital, Columbus, OH, (614) 722-2890.

The NCI-NAPBC Breast Cancer Specimen and Data Information System can provide additional information on breast cancer tissue resources (<http://www-napbc.ims.nci.nih.gov>).

Other human specimen resources for cancer research may be available through collaborative arrangements. For further information, please contact Ms. Marianna Bledsoe, NCI, (301) 496-7147, e-mail: mb80s@nih.gov.

The Power Of Technology Gives Us The Power To Discover.

Sphinx Pharmaceuticals continues to reinvent the lead generation process by bringing screen development, automation, high throughput screening, combinatorial chemistry, and information technology into a fully integrated drug discovery engine.

This inclusive team

approach will allow you to utilize your current scientific expertise while working closely with other scientists to develop cutting-edge drug discovery tools.

Our Cambridge site is embarking on a new mission to expand its combinatorial chemistry capabilities from small molecules to peptide and protein-mimetic structures. The following opportunities are available:

Associate Scientists Both Bachelor's and Master's levels

The qualified candidates will have a strong background with **Peptidomimetic Chemistry** and **Protein Chemistry** and will focus on the development of new methods, technologies, and chemistries for parallel array synthesis of protein-mimetic compounds. Successful candidates will be responsible for projects in one or more of the following areas: solid phase synthesis, library design, development of new processes (manual and automated) for parallel synthesis, programming of automation equipment, initial SAR of combinatorial chemistry leads, and development of new chemistries resulting in novel library preparation.

Advance your career while working in one of the country's most exciting locations! Sphinx Pharmaceuticals is located in the heart of **Cambridge, Massachusetts** on the banks of the scenic Charles River. This unique suburb of Boston not only affords a terrific view of the city skyline, but also hosts an international population, rich with diversity and alive with culture. Integrated throughout Cambridge are some of the world's best educational institutions and a thriving biotech community comparable to none. And with the competitive compensation, benefits and supportive professional environment, you'll have the power to achieve your career goals. For consideration, please send your resume to: **Sphinx Pharmaceuticals, Attn: Human Resources (SC-6/19), 840 Memorial Drive, Cambridge, MA 02139.** We are an Equal Opportunity Employer.

SPHINX
PHARMACEUTICALS
A Division of

Lilly



EPIDEMIOLOGIST - Herpesviruses Division of Viral & Rickettsial Diseases National Center for Infectious Diseases Centers for Disease Control & Prevention

The Centers for Disease Control & Prevention is seeking qualified applicants for an Epidemiologist position in the Viral Exanthems & Herpesvirus Branch, Division of Viral & Rickettsial Diseases. The incumbent will function as a key member of a multidisciplinary scientific team responsible for the development, implementation, and evaluation of novel laboratory-based epidemiologic research studies. This research includes identifying factors applicable to the etiology, diagnosis, therapy, and conduct of laboratory-based studies of diseases associated with HCMV, HHV-8, and other herpesviruses (e.g., atherosclerosis, mental retardation, multiple sclerosis, Kaposi's sarcoma).

Qualifications include outstanding scientific credentials; experience and certification in infectious disease, pathology, or epidemiology; and proven ability to engage in original laboratory-based epidemiologic research with other scientists. A medical degree or advanced degree (Ph.D., Sc.D., or other) in epidemiology is required. Candidates will be evaluated based on (1) professional knowledge of current facts and theory in the epidemiology and pathogenesis of herpesviruses infection and disease; (2) ability to utilize epidemiological, biostatistical, and laboratory methods to design, manage, and evaluate epidemiology research programs involving herpesvirus infections and associated diseases; (3) written communication abilities; (4) oral communication abilities; and (5) skills in leading multidisciplinary epidemiology, statistical, and laboratory research programs.

The position will be an initial two-year Research Fellow appointment. Annual salary range from \$55,400-\$85,104 depending on qualifications.

Interested applicants should send their CV and names of three references (including the current supervisor) by July 31 to Ms. Janie L. Oddy, Human Resources Management Office, Centers for Disease Control & Prevention, 1600 Clifton Rd., NE (C-12), Atlanta, GA 30341-3724. E-mail: jlo0@cdc.gov.

science serving society

POSTDOCTORAL POSITIONS IN DNA REPAIR AND HOMOLOGOUS RECOMBINATION

The DNA Damage and Repair Group (LS-6) in the Life Sciences Division at Los Alamos National Laboratory is seeking qualified Postdoctoral candidates in the following areas:

1. Transgenic Mouse Models for DNA Repair. The specific emphasis of this project is to understand functions of DNA repair, recombination or damage recognition proteins "in vivo." Research directions will focus on investigating the phenotype of transgenic mice or derived cell lines and to establish transgenic mouse models for new DNA repair genes. Experience in ES cell culture, knockout vector construction and embryo manipulation are desirable.

2. Homologous Recombination Repair. The goal of this project is to determine the role of several human homologous recombination genes in DNA repair and genome instability using transgenic mouse cells or knockout human cell lines and "in vivo" homologous and nonhomologous recombination assays. Applicants should have training and experience in cell and molecular biology. Experience in recombination and DNA repair assays in yeast or mammalian cells is desirable.

3. Atomic Force Microscopy. Application of high-resolution microscopy techniques to the characterization of DNA repair proteins and their complexes with damaged DNA substrates will be examined. This project will focus on the extension of a successful molecular microscopy project to include the analysis of chromatin as a substrate for DNA repair proteins, the analysis of DNA repair complex assembly, and affinity of repair proteins for various DNA substrates. Preference will be given to candidates with prior experience in electron or atomic force microscopy.

4. Biochemistry of DNA Repair and Recombination Proteins. Research directions are focused on biochemical functions of mammalian DNA homologous recombination repair, DNA double-strand break repair, or DNA damage recognition proteins. Applicants should have strong training in molecular biology and protein biochemistry. Preference will be given to candidates with prior experience in protein purification and/or expression of recombinant proteins in insect cells.

A Ph.D. in Biochemistry, Molecular and Cell Biology, Radiation Biology or Molecular Genetics, completed within the last three years or soon to be completed, is required. Candidates with training and experience specific to the position description are encouraged to apply. For technical details contact Dr. David J. Chen by fax at (505) 665-0123/665-3024, or e-mail: dchen@lanl.gov.

Annual starting salaries range from \$36,560-\$39,440, plus a generous, comprehensive benefits package. For consideration, submit TWO COPIES of a resume and publications list along with a cover letter outlining current research interests to: Postdoc Programs, SCIENCE-983720, MS-P290, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Individuals with disabilities needing reasonable accommodation should call (505) 667-8622. A Teletype Device for the Deaf (TDD) is available by calling (505) 665-5357.

Los Alamos
NATIONAL LABORATORY

Operated by the University of California
for the Department of Energy

Call for Recruiters from Industry, Academia and Non-Profit Agencies: NIH Postdoctoral Job Fair

October 6, 1998



Would you like to reach 2,500 of the world's top postdoctoral scientists?

The National Institutes of Health is sponsoring the third annual Postdoctoral Job Fair, to be held in conjunction with the NIH Intramural Research Festival at the Natcher Conference Center on the NIH campus in Bethesda, MD, from 9:00 a.m. to 5:00 p.m. on October 6, 1998. The Job Fair will give exhibitors the opportunity to meet postdoctoral fellows who are completing their research training and seeking permanent employment. We welcome representatives from domestic and foreign industry, the academic community and government and non-profit agencies that have vacant positions which demand highly skilled, highly trained professionals.

Recruiters at the Job Fair will have access to NIH's pool of 2,500 postdoctoral trainees—nearly 15% of the biomedical fellows supported by the NIH in the United States. Their research experience ranges from cutting-edge basic science to clinical investigation and the development of drugs, methods, and technology. Their expertise spans the biomedical spectrum, including:

AIDS research	cell biology	imaging	neuroscience
behavioral science	chemistry	immunology	pathology
biophysics	clinical research	informatics	pharmacology
biostatistics/epidemiology	developmental biology	molecular genetics	structural biology
biotechnology	genomics	molecular biology	virology

Postdoctoral fellows trained at NIH have traditionally become leaders in biomedical research. Many of today's trainees will follow in their footsteps, but a significant number are also interested in careers in other occupational areas where their outstanding training, creativity, and skills would be an asset.

There is no fee for exhibitors at the Job Fair, but space is limited, and early confirmation of intent to participate is recommended. Organizations wishing to recruit at this year's Job Fair should submit a copy of their company's prospectus or a description of their organization, as well as a description of the positions they seek to fill, and name, address, telephone, and e-mail address for their contact person by August 1, 1998 to:

Ms. Shirley Forehand
NIH Office of Education
Bldg. 45, Rm 5AN12K
45 Center Dr. MSC 6505
Bethesda, MD 20892-6505

National Institutes Of Health

ZymoGenetics, Inc. is a biotechnology company located in Seattle's historic Lake Union Steam Plant. Our mission is to identify protein therapeutic opportunities and to take selected projects as far as clinical proof of concept studies. We are currently seeking qualified candidates for the following position:

Research Associate II

The Protein Expression Technology department is seeking an individual to fill an RA II position in Molecular Biology and Tissue Culture. This individual will work with the Baculovirus/Insect Cell Protein Expression group to produce recombinant virus expressing proteins of interest to a therapeutic protein discovery effort. The successful candidate will have a solid background in molecular biology and some substantial experience in eukaryotic cell tissue culture. Candidates with experience in virology will be of particular interest. The individual must also possess strong organizational and communication skills with a demonstrated level in computer software. Versatility and flexibility are essential with the ability to work independently within time constraints. Duties may include plasmid construction, bacterial transformations, DNA and protein purifications and analysis, insect cell transfections, viral plaque assays, small to medium scale cell culture, immunoprecipitations, and computer database maintenance. Requires a BS/BA in a scientific discipline or equivalent.

As a subsidiary of NOVO NORDISK, the world's largest producer of industrial enzymes, ZymoGenetics offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation. We also offer intellectual challenge, state-of-the-art facilities and a generous benefits package. Please apply by sending a cover letter noting **Job reference #34R298** and a detailed resume of your work experience and academic background to: ZymoGenetics, Inc., Attn: Human Resources; 1201 Eastlake Avenue East; Seattle, WA 98102. Fax: (206) 442-6658. EOE.

ZYMOGENETICS

Postdoctoral Associate Positions The Department of Anatomy and Cell Biology The University of Iowa

Postdoctoral positions are available in the laboratory of **Dr. John F. Engelhardt, Ph.D.**, to develop redox mediated gene therapies for environmentally induced liver injury. Rodent models are used to better understand the mechanisms of free radical mediated tissue damage in two independent research areas: 1) sepsis and 2) liver transplantation. Of particular interest in these mechanisms are redox regulated pathways of signal transduction (such as AP-1 and NFkB), which determine the course of hepatocellular apoptosis and regeneration. These mechanisms will lay the foundation for the rational development of gene therapies aimed at decreasing liver damage and enhancing liver regeneration following injury (*Nature Medicine* 4:698-704, 1998). Successful applicants will have an M.D. and/or Ph.D., as well as experience utilizing molecular biology, cell biology, and/or recombinant viral vectors. A strong background in signal transduction is essential.

Send curriculum vitae, three letters of reference, and a statement of research experience to: **George McHenry, Department of Anatomy and Cell Biology, 1-100C Bowen Science Building, The University of Iowa, Iowa City, IA 52242.** *The University of Iowa, College of Medicine, is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

CHAIR DEPARTMENT OF ENVIRONMENTAL AND POPULATION HEALTH Tufts University School of Veterinary Medicine

Applications and nominations are solicited for the position of Chair of the Department of Environmental and Population Health, Tufts University School of Veterinary Medicine. This Department was recently formed with 18 full-time faculty members to address, in an academic setting, growing concerns about environmental quality associated with biodiversity, ecosystem health, sustainable agriculture, wildlife conservation, and animal well being. The Department offers four of the five signature programs of the School: Veterinary Ethics and Values, International Veterinary Medicine, Wildlife Medicine, and Veterinary Biotechnology. Two of the School's three centers are located in the Department: the Center for Animals and Public Policy and the Center for Conservation Medicine. Activities of the faculty include instruction in veterinary and graduate degree (M.S.) programs, research activities, and participation in clinical service in wildlife, laboratory animal, and large animal ambulatory medicine.

The selected person should have demonstrated leadership and extramural fund-raising abilities. Preference will be given to individuals who have expertise in environmental sciences/policy, conservation medicine, and/or population health and have experience in veterinary medical/biomedical teaching. The successful candidate will be expected to provide leadership in professional and graduate education; facilitate faculty development in areas of teaching, research, and service; and foster the development of environmental health and conservation medicine as major research, education, and public policy focuses of the School. An advanced degree is required. D.V.M.'s as well as non-D.V.M.'s are encouraged to apply. Review of applications will begin on July 1, 1998, and continue until the position is filled. Applications should include curriculum vitae and a list of at least three references along with a letter indicating interest and expertise. Send applications or nominations to **Dr. Sawkat Anwer, Search Committee Chair, Tufts University School of Veterinary Medicine, 200 Westboro Road, N. Grafton, MA 01536.**

Tufts University is an Affirmative Action/Equal Opportunity Employer.

Website: www.Tufts.Edu



GROSS ANATOMIST

The Department of Anatomy at The University of Health Sciences College of Osteopathic Medicine seeks to fill an Assistant Professor position. Applicants should have a Ph.D. in Anatomy with experience in teaching human gross anatomy (lecture and laboratory dissection). The person filling this position must have strong interest and commitment to teaching medical students. Other duties include scholarly work such as research or writing; active participation in departmental activities and professional development; service to the University on committees; and advising medical students. We are looking for a positive team player with exemplary professional characteristics.

Salary is dependent on qualifications and experience; excellent benefits. Qualified applicants should send their applications including curriculum vitae, a statement of teaching philosophy and scholarly interests, and the names and telephone numbers of three references to: **Dawn M. Harrington, Director of Human Resources, The University of Health Sciences-COM, 1750 Independence Blvd., Kansas City, MO 64106-1435.** Pre-employment drug screen required. An Affirmative Action/Equal Opportunity Employer.

National Cancer Institute ■ National Institutes of Health
**HEAD OF ALL EXTRAMURAL RESEARCH TRAINING AND CAREER DEVELOPMENT
AND CANCER EDUCATION PROGRAMS #CA 98-1935**

Opening Date: June 8, 1998

Closing Date: July 31, 1998

The National Cancer Institute seeks a Chief for its Cancer Training Branch (CTB). This position oversees the planning, development and implementation of all NCI grant programs in research training and career development as they relate to the basic, clinical and population sciences. Responsibilities also include all cancer education activities intended for medical and public health professionals and the lay public. The CTB also oversees a comprehensive program for recruiting and sustaining underserved populations in cancer research. Through its interactions with extramural scientists in workshops and at national meetings and with NCI advisory groups, the CTB plans, develops and implements the strategies and award mechanisms for training the next generation of cancer researchers. The CTB works closely with the applicants who are competing for extramural National Research Service Awards, Career Development Awards and Education Grants and sets priorities for allocation of available resources to meet the NCI's mission and objectives. This is a position that must interact and communicate effectively with the entire cancer research community, as well as work closely with all organizational units of the NCI.

SALARY RANGE AND BENEFITS: Salary ranges from \$77,798 to \$101,142 per annum. Benefits include health and life insurance, retirement, paid holidays, vacation and sick leave. Salary includes locality pay.

BASIC QUALIFICATIONS: U.S. citizenship is required. Applicants must meet the basic experience and educational qualification requirements for U.S. government Medical Officer, Biologist, Microbiologist, Geneticist, Health Science Administrator or Chemist positions. In order for the qualifications to be validated and considered, it is mandatory that you submit the following with your application: **A.** An undergraduate and graduate transcript or course list which includes

grades, and semester hours received per course for all courses; **B.** A current curriculum vitae; and **C.** A description of your proficiency in the following Knowledge, Skills and Abilities (KSAs):

1. General knowledge or familiarity with the basic, clinical and population sciences relating to cancer.
2. Knowledge and familiarity with the fundamental issues and problems related to the training and career development of individuals in multiple scientific disciplines.
3. Ability to plan, develop, and implement new or expanded activities in area of biomedical research or training to achieve specific goals and objectives.
4. Ability to work effectively with scientist, science administrators, or groups of scientists representing multiple scientific disciplines and perspectives to achieve consensus on broad issues.
5. Ability to lead and manage a research grant program or equivalent as it relates to broad scientific objectives.

APPLICATION PROCEDURES: The NCI recruitment bulletin for this position contains complete application procedures and lists all mandatory information which you must submit in your application. To obtain the recruiting bulletin, call 1-800-728-JOBS (for local calls, 301-594-2953). When prompted, enter the "Fax ID Number" 1878 for CA-98-1935. You will be prompted for your fax machine number. If you have any questions on qualification requirements or application procedures, or if you wish to obtain a position description or other information, please call (301) 402-2812.

Please submit your resume, SF-171 Application for Federal Employment or OF-612 Optional Application Form by the closing date to:



National Institutes of Health
NATIONAL CANCER INSTITUTE

Human Resource and Consulting Branch
6120 Executive Boulevard, MSC 7211
Executive Plaza South, Suite 550
Rockville, MD 20852-7211



NIH is an Equal Opportunity Employer

EXTRAORDINARY PEOPLE. EXTRAORDINARY SCIENCE.



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

PROTEIN EXPRESSION SPECIALIST

• Seeking a Research Specialist with experience in the production and purification of proteins to work with a dynamic group on studies of viral membrane fusion. Requires extensive experience in molecular biology and protein biochemistry and a Ph.D. in biochemistry or equivalent education and experience. Must have experience with baculovirus expression including creation of expression vectors, isolation of recombinant virus, and large scale protein production and purification. Experience with other expression systems (Pichia and mammalian) desirable.

We offer excellent salaries, generous benefits (including tuition reimbursement), interaction with MIT community, opportunity to attend scientific lectures, state-of-the-art research facilities, and a convenient location.

Please send resumes to: Whitehead Institute for Biomedical Research, Human Resources Dept., Ref. SCI:619, Nine Cambridge Center, Cambridge, MA 02142.

Visit our web site at: <http://www.wi.mit.edu>.

Equal Opportunity Employer



WHITEHEAD INSTITUTE

Edmonton,
Alberta, Canada
and Waltham,
Massachusetts

AltaRex Corp. is building its Research capabilities in Edmonton, Alberta, Canada to discover and develop immunotherapeutics to treat cancer. The Company's products are based on its unique murine anti-body approach, called Anti-idiotype Induction Therapy. AIT™ enhances the ability of the human immune system to produce a highly effective anti-tumor response. AltaRex is developing products for ovarian, breast, gastrointestinal, prostate and lung cancers. The Company is currently in a Phase IIb North American trial for its OvaRex™ product and expects to file an IND for its Brevax™ product in the second half of this year. For more information, please visit our website at www.altarex.com.

Group Leader Biological Evaluation

We are looking for a distinguished Ph.D. level immunologist or cell biologist to lead a group of 6-8 technical and scientific staff. Responsibilities include the development of biological and immunological assays, studies on mechanism of action, development of animal models and testing of components in these models.

The position requires a minimum of 3-5 years of documented industrial experience, including several years of direct supervisory responsibility. The position will report to the Director of Research and is located in Edmonton, Alberta, Canada.

Group Leader Discovery

This position requires an experienced Ph.D. level scientist in immunology and/or molecular biology who will lead a group of 6-8 technical and scientific staff in exploring second generation immunotherapeutics. Responsibilities include the development of single chain antibodies with various effector domains, the phage display library, and assays to test the efficacy of the constructs and to establish in vivo characterization.

The candidate should have a minimum of 3-5 years of documented industrial experience, including several years of direct supervisory responsibility. The position will report to the Director of Research and is located in Edmonton, Alberta, Canada.

We offer competitive salaries and a comprehensive benefits program. Applications including a curriculum vitae and three references should be sent to:

Human Resources, AltaRex, Corp.,
303 Wyman Street, Suite 125, Waltham, MA 02154 USA
Fax number: 781-672-0142
E-mail: info@altarex.com



ALTAREX

NYU
Medical
Center

Assistant Professor DEPARTMENT OF BIOCHEMISTRY

The Biochemistry Department of New York University Medical Center seeks to fill a tenure track position at the level of assistant professor. Areas of research currently represented in the Department include DNA replication, recombination, regulation of transcription and translation, protein folding and transport, viral-host cell interactions, cellular transformation and signal transduction. Applicants should hold a Ph.D. or M.D. degree and have at least two years of postdoctoral research experience. You'll also be expected to establish an independent research program and participate in teaching and other departmental academic activities. Applicants should submit CV, three letters of reference and a brief summary of current and future research interests by September 1, 1998 to:

Faculty Search Committee, Department of Biochemistry, New York University Medical Center, 550 First Ave., New York, NY 10016.

For more information about the Biochemistry Department and NYU Medical Center, see our web page at <http://mcrcr4.med.nyu.edu/Biochem/HomePage.html>

WHERE EXCELLENCE IS A WAY OF LIFE.

Research Opportunities Transgenics

Postdoctoral Fellow, Research Assistant Professor and Research Assistant positions available immediately to study the taste-specific G protein gustducin and its role in taste transduction (Nature 381: 796, 1996; Nature 376: 80, 1995; Nature 376: 85, 1995; Nature 357: 563, 1992). Projects involve the generation and analysis of transgenic mice to study mammalian taste transduction mechanisms.

Mount
Sinai

® Postdoctoral Fellow/ Research Assistant Professor

Ph.D. in molecular biology or biochemistry with a strong background in transgenic techniques and animal husbandry required. Experience with cre/lox and conditional genetic techniques desirable. Candidates with 5 or more years of relevant postdoctoral experience may be considered at the Research Assistant Professor level.

Research Assistant

B.S. or M.S. in molecular biology or biochemistry plus 3 years of relevant experience in the generation and analysis of transgenic or knockout mice required.

For consideration, please send your curriculum vitae, indicating the position of interest, along with names and addresses of three references to: **Dr. R. F. Margolskee, Department of Physiology and Biophysics, Box 1677, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Fax: 212-849-2599.** We are an equal opportunity employer fostering diversity in the workplace.

Mount Sinai School of Medicine

MOLECULAR SCREENING TECHNOLOGIES: HIGH THROUGHPUT SCREENING

By striving to constantly maintain the lead in scientific innovation, SmithKline Beecham has developed a worldwide reputation for pioneering healthcare treatments. The Department of Molecular Screening Technologies is pivotal to the drug discovery process and plays an ever-increasing role in the identification of lead compounds for novel therapeutic targets. This department is responsible for developing innovative new assay technologies and performing high throughput screens for all therapeutic areas within the company, and SB has made a major commitment to leadership in this area.

The recent explosion of molecular targets from the genomics initiative and chemical compounds derived from combinatorial chemistry has resulted in an unprecedented need for new screening technologies. The company has made a significant investment in novel fluorescence methods, assay miniaturization technology and state-of-the-art robotics to address this need. As a result of this commitment, SB is poised to lead the industry in the field of UltraHigh Throughput Screening.

Several positions are available within this dynamic and creative environment for candidates experienced in biochemistry and assay development. We are looking for innovative scientists who want to work in a team environment toward the goal of discovering new lead candidates for therapeutic areas. Experience in assay development, HTS, robotics and fluorescence methods is desired.

Group Leader

The successful candidate will lead a group of scientists to develop and execute high throughput screens. Responsibilities also include developing and implementing new miniaturized assay technologies for high throughput screening, as well as selecting and implementing appropriate instrumentation and robotics. The group leader will define strategies and direction for the department, and act as primary contact for US-based therapeutic areas.

Qualified candidates will possess a PhD in Biochemistry, Chemistry or Biology and at least 5 years of industrial experience in assay development and high throughput screening, including proven leadership ability in a team environment. Experience with new assay technologies including fluorescence, SPA, assay miniaturization and robotics is required, along with excellent communication skills. (Job Code: H8-0200)

PhD Scientist

The successful candidate will develop and implement new miniaturized assay technologies for high throughput screening, as well as manage their execution. This role provides interaction with a variety of therapeutic areas to develop assays and requires the implementation of novel instrumentation and automation.

Qualified candidates will possess a PhD in Biochemistry, Chemistry or Biology and at least 3 years' experience in an industrial setting, preferably in assay development and high throughput screening. Experience with new assay technologies and robotics is desired. Proven ability to work independently and excellent communication skills are a must. (Job Code: H8-0199)

Scientist

The successful candidate will be involved in the high throughput screening efforts of the department, including the use and maintenance of automated equipment. Responsibilities will also include robotic programming and implementation as it applies to biochemical and cell-based assays. This role provides general automation support to the group, including adapting and upgrading instruments.

Qualified candidates will possess a BS or MS degree in Chemistry, Biochemistry or Engineering and at least 3 years' experience in a high throughput screening environment. Excellent computer, communication and mechanical skills are a must. Experience in the development of high throughput screening assays is highly desirable. (Job Code: H8-0155)

Located in our state-of-the-art research facilities in suburban Philadelphia, PA, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please send your resume, and the names of three references, to: SmithKline Beecham Pharmaceuticals, (Job Code), P.O. Box 40047, Philadelphia, PA 19106. Indicating Job Code is essential. We are an Equal Opportunity Employer, M/F/D/V.

www.sb.com


SmithKline Beecham
Pharmaceuticals



Texas Biotechnology Corporation

Texas Biotechnology Corporation is a thriving biopharmaceutical company with over 90 employees in the Texas Medical Center in Houston. Our mission is to use computational drug design and combinatorial chemistry to discover small molecule drugs for vascular disease targets.

Senior Scientist: We are seeking a candidate to lead a new project on surface receptors, apoptotic signaling, and neurodegenerative diseases in apoptosis. You will need a Ph.D. and more than 3 years of postdoctoral experience, broad intellectual interests, technical expertise in molecular biology, and supervisory experience. You will 1) lead a project in the basic biology of receptor-mediated apoptotic signaling, 2) establish a high-throughput screening assay to be performed by our HTS core, 3) develop cell and animal models in collaboration with our Tissue Culture and Animal Sciences groups, 4) coordinate efforts between drug screening, computational drug design, and synthetic chemistry, and 5) participate in the active, dynamic environment with scientists at Texas Biotechnology and our many outside collaborators.

Research Associate: The successful candidate will have a M.S. degree or a B.S. degree with a minimum of 4 years of experience in cloning, mutagenesis, and expression of surface receptors as well as assay development. Additional experience in signaling is also desirable.

Research Assistant: This B.S.-level position requires technical experience in basic molecular biology, biochemistry, and/or cell biology. Preference will be given to individuals with experience in cell-based assays, immunological techniques, and gene expression.

Texas Biotechnology Corporation is an Equal Opportunity Employer offering competitive salaries and excellent benefits. If you are interested in the challenges and opportunities of an exciting biotechnology company, please forward your CV and the names of three references to: **Larry Denner, Ph.D., Director of Apoptosis Program, Texas Biotechnology Corporation, 7000 Fannin, Suite 1920, Houston, TX 77030. E-mail: ldenner@tbc.com fax: 713-796-8232**

GENEMEDICINE, Inc. is developing several novel, non-viral gene therapies that capitalize on the new broad front of genetic knowledge. The Company currently has an opening in its Antigen Presenting Cell Platform Team. Bring your expertise to this group of highly skilled and motivated researchers engaged in the discovery and development of novel technologies for genetic immunization.

SR. SCIENTIST, ANTIGEN PRESENTING CELLS PLATFORM

Play an integral role in the creation and optimization of novel plasmid delivery systems and formulations for the targeting of dendritic cells. As a member of the APC Team, you will provide expertise in devising methods to assemble plasmid with various delivery elements, formulating plasmid for targeting dendritic cells in the skin and draining lymph nodes, develop assays to characterize delivery systems and design formulations for intradermal gene delivery using devices.

Successful candidates for this position will have a Ph.D. or equivalent degree in a related field with demonstrated experience and success in creating novel delivery systems. You should have a proven track record of successful discovery of delivery systems (preferably targeted systems) and expertise in colloidal sciences. Experience with genetic immunization and/or immunology is a plus. In addition, you should have excellent verbal and written communication skills and the ability to work in an interdisciplinary team environment.

GENEMEDICINE, Inc. offers career growth and a highly competitive compensation and benefits package. For confidential consideration, please submit resumes via fax or e-mail to: **Recruitment Manager at: 281/364-0858 or recruitmentmanager@genemedicine.com**

GENEMEDICINE, INC.
is an EEO Employer.



GENEMEDICINE, INC.

SCIENTIFIC PROGRAM MANAGER

Major international health foundation is seeking a Scientific Program Manager to work in our Research Department. The successful candidate will assist in the planning of the research grants program, training grants, program, projects and collaborations. Will help determine program priorities and funding levels as well as track and prepare analyses of research requirements. Coordinate programs and committees. Assist in the supervision of the grant administration process and oversee information systems for the Research Department.

Post doctoral scientific research experience or equivalent is a must. Ph.D., MD or equivalent professional degree is preferred. Excellent written, verbal and interpersonal skills are essential.

Please forward your resume and salary requirements to: **The Juvenile Diabetes Foundation International, 120 Wall Street, 19th Fl, New York, NY 10005-4001 or fax to: 212-785-9595.**



AN EQUAL
OPPORTUNITY
EMPLOYER
M/F/D/V

MOLECULAR BIOLOGIST/ ASSAY DEVELOPMENT

Third Wave Technologies, Inc., a fast growing biotechnology company that is developing and commercializing simple, accurate and low-cost nucleic acid (DNA/RNA) technology platforms that it believes will fundamentally alter disease discovery, diagnosis, and treatment, is expanding and recruiting for associate and senior-level scientist positions.

Applicants should have a B.S. to Ph.D. in molecular biology, medical microbiology, biochemistry, or a related field, as well as 1-5 years experience developing DNA/RNA probe assays for the detection of genetic mutations, SNPs, gene expression, and infectious disease.

Candidates should have demonstrated knowledge of all mechanics of nucleic acid hybridization and amplification technologies. Ability to supervise and successfully lead a group of scientists is desired for senior-level positions.

Third Wave offers an attractive benefits and relocation package including stock options. If you are interested in joining the Third Wave team, send your résumé and cover letter stating your salary history to:

Third Wave Technologies, Inc.
Attn: Human Resources SC-1
502 South Rosa Road
Madison, WI 53719-1256
Fax: 608-663-7045
E-mail: employment@twi.com
www.twi.com

Equal Opportunity Employer

CHAIR Department of Medicine Emory University School of Medicine

Emory University School of Medicine invites nominations and applications for the position of Chair, Department of Medicine.

This position offers outstanding resources and institutional commitment in the setting of a major metropolitan market.

We are seeking an individual with proven leadership and personal abilities required to direct a large and complex academic department, an outstanding record of accomplishments in biomedical research, and a commitment to maintain and enhance the Department's strong clinical programs in the face of the national changes in the delivery of health care.

Applications and nominations should include a current curriculum vitae and names and addresses of three references. They should be submitted to:

**Medicine Chair Search Committee
c/o Office of the Dean
EMORY UNIVERSITY
SCHOOL OF MEDICINE
1440 Clifton Rd. NE, Ste. 320
Atlanta, GA 30322**

The Search Committee will review applications until the position is filled.

*Emory University is an Equal Opportunity/
Affirmative Action Employer*



**United States Environmental Protection Agency
National Exposure Research Laboratory
Human Exposure and Atmospheric Sciences Division**

The U.S. Environmental Protection Agency (EPA) is seeking highly qualified senior scientific/engineering candidates for the Director of the Human Exposure and Atmospheric Sciences Division (HEASD), National Exposure Research Laboratory (NERL) located at Research Triangle Park (RTP), North Carolina. The NERL is responsible for conducting research and development related to the exposure of people and ecosystems to a wide range of pollutants in the air, water, and soil, and to other environmental changes resulting from human activities at a wide range of scales. The HEASD conducts intramural and extramural research to characterize exposures, across the whole of the exposure assessment paradigm from pollutant source to the dose delivered to the exposed person or receptor. The principal foci of the Division's research are human exposure to chemical pollutants and atmospheric sciences. The Division's research mission encompasses aspects of all components of the exposure assessment paradigm, including exposure/source research; atmospheric processes modeling research; environmental characterization research, including characterizing microenvironmental concentrations/exposures, and defining the critical routes of exposure; exposure analysis research; and exposure/dose research. The human exposure research has both modeling and measurement aspects. It focuses on exposures to susceptible subpopulations and includes field studies of total exposure measurements, the development of probabilistic human exposure models, and the linkage of these models to environmental process models and dose models to achieve source-to-dose models. The atmospheric sciences portion of HEASD's research includes the development and application of instruments and methods to measure atmospheric pollutants and their precursors; chamber and kinetics studies of the chemistry of air pollutants; the development of source apportionment techniques; and the comprehensive profiling of emissions from on- and off-road mobile sources burning gasoline with and without fuel additives.

The Director of HEASD plans, develops, organizes, directs, and implements a highly technical and complex research and development program that has nationwide impact with an annual budget in excess of \$25M and a staff of approximately 130 employees located in RTP and Las Vegas, Nevada. The Director and scientists under the Director's supervision are the Agency's experts in the area of multipathway, multimedia human exposure to environmental contaminants and atmospheric sciences, measurement methods, chemistry, and source characterization; and, therefore, they interact and represent the Agency to a large community of scientists, both nationally and internationally, as well as to the general public and legislative leaders. Ultimately, the research performed will provide an understanding of the critical factors to be considered in developing and implementing programs for the protection of the public's health.

The preferred candidate for this position will have a doctoral degree in one of the biological, physical, or mathematical sciences or in an engineering field. Candidates must also have scientific expertise in either atmospheric sciences or human exposure to chemicals and have demonstrated leadership in scientific management of state-of-the-art programs in atmospheric sciences or human exposure to chemicals. In addition, applicants must meet the executive and technical qualifications described in the vacancy announcement. Salary ranges from \$104,577–\$114,486 per annum, commensurate with the level of appointment in the Senior Executive Service.

To apply for this position, you must obtain a copy of the vacancy announcement and submit an application containing all the requested information by the closing date of the announcement. All applications for this position must be postmarked by 8/28/98. The vacancy announcement may be obtained by calling or writing **Ms. Karen Stinson (202) 260-6374, U.S. EPA, Executive Resources & Special Programs (3641), 401 M Street SW, Washington, DC 20460**. The announcement may also be viewed on the Office of Research and Development's Internet Site at <http://www.epa.gov/ord/>.

The U.S. EPA is an Equal Opportunity Employer.

TOXICOLOGIST

Rhône-Poulenc Ag Company operates in a dynamic environment. Our success depends on our ability to attract dynamic, creative professionals who are eager to meet challenges head on. We have an immediate need for an experienced Toxicologist and human exposure assessment expert to provide technical expertise and program management for U.S. Business Operations.

The essential functions are as follows:

- Manage and defend toxicology dossiers for commercial products and those in development.
- Calculate human exposure and margins of exposure for current or developmental compounds.
- Assess potential exposure mitigation measures; determine exposure assessments for various use/crop/activity scenarios to evaluate potential markets; ensure aggregate and cumulative exposure evaluations for POPA.

This position requires a Ph.D. or doctorate in Toxicology with 5 to 10 years' experience in agrochemicals, preferably in exposure analysis. A solid understanding of agriculture and the use of agrochemical products is essential along with the capacity to work autonomously and manage scientific projects. Excellent interpersonal and communication skills with the ability to convey technical concepts and information to a non-technical audience are required.

We offer a competitive compensation and benefits package. If you meet the above requirements and are seeking a challenging opportunity to contribute to a dynamic team, please send your resume and salary history in confidence to: **Employment Coordinator (T), Rhône-Poulenc Ag Company, P.O. Box 12014, RTP, NC 27709.**



We are an Equal Opportunity Employer. We do not discriminate on the basis of race, religion, color, sex, age, national origin or disability.

BIG CHALLENGES. GREAT SCIENCE.

Agouron, a fully integrated pharmaceutical company in La Jolla, CA, is a recognized leader in the field of rational drug design. Building upon the success of our first product, an HIV protease inhibitor, Agouron continues on the forefront of research and development of therapeutic products in the fields of oncology, virology, ophthalmology and other serious diseases. Join us in the challenge of great science.

PHD, MS AND BS SCIENTISTS, VIROLOGY

We are seeking experienced PhD, MS and BS level scientists to join our expanding virology team. The overall responsibility will include planning and implementation of research aimed at the discovery, evaluation and development of novel therapeutic anti-HIV agents. Candidates should have demonstrated ability in infectious HIV cell-based assays, molecular biology and biochemistry laboratory techniques, while BSL-3 experience is preferred. In addition, candidates must have the desire to work in multi-disciplinary teams and an enthusiasm for research.

Agouron offers competitive salaries and benefits. Please send a detailed resume and salary history referencing code to: Human Resources, Code 125/AP, Agouron Pharmaceuticals, Inc., 3301 N. Torrey Pines Court, La Jolla, CA 92037; email: jobs@agouron.com; web site: www.agouron.com. EOE



G-PROTEIN COUPLED RECEPTORS AND ION CHANNELS

Developing Bioassay Technologies for Drug Discovery

Aurora Biosciences Corporation is a leader in the development and application of cell-based fluorescence assays and automation for drug discovery. We are currently recruiting talented, motivated scientists with expertise in G-protein coupled receptors and/or ion channels. These positions contribute to both an expanding internal research program, as well as collaborations with external partners to develop technology solutions for these major classes of therapeutic targets.

Scientist (Ion Channels)

Successful applicant will be engaged in developing and implementing assay technologies for ion channels. Requires a Ph.D., preferably with postdoctoral experience, encompassing a multidisciplinary background in several of the following areas: ion channel biophysics, electrophysiology, chemistry, optical instrumentation, and fluorescence spectroscopy. The nature of the position also requires both creativity and excellent quantitative/analytical skills in order to conceive and apply technical solutions to biological problems.

Group Leader/Principal Scientist (G-protein Coupled Receptors)

This key position will provide expertise in molecular pharmacology and signal transduction of G-protein coupled receptors. In addition, this individual will direct a group responsible for developing function-based assay approaches for orphan receptors. In this regard, experience in either the cloning and/or functional analysis of orphan receptors and/or related

proteins is required. The position also requires a Ph.D., preferably with post-doctoral experience. Candidate should have the ability to work independently, strong managerial skills, and a proven record of success. Excellent communication skills essential.

Aurora offers a competitive salary, benefits, and equity participation including an ISO and Stock Purchase Program. For consideration, please send your resume and cover letter, to: Human Resources, Aurora Biosciences Corporation, 11010 Torreyana Rd., San Diego, CA 92121; Fax: (619) 404-6720; E-mail: SylvesterK@aurorabio.com For more information on Aurora, please refer to <http://www.aurorabio.com> An Equal Opportunity Employer.



POSTDOCTORAL TRAINING IN AIDS RESEARCH

**Kimmel Cancer Center
Thomas Jefferson University
Philadelphia, PA**

Training Program for AIDS Research, Kimmel Cancer Center, Thomas Jefferson University: **A. Srinivasan** (Director) - HIV molecular biology; role of HIV genes in AIDS pathogenesis; development of non-infectious systems for delivering vaccine antigens; **C. Croce** - AIDS-related malignancies; role of BCL-2 on HIV-1 infection; **N. Flomenberg** - transplantation tolerance; gene therapy; **H. Koprowski** - expression of HIV gp120 in edible plants; vaccine development; **R. Korngold** - T-cell immunobiology; **W.E. Mercer** - mechanism of cell cycle arrest by HIV-1 genes; **R. Pomerantz** - neuropathogenesis of HIV-1; HIV-1 latency and tropism; **I. Weber** - structural analysis of HIV PR and related retroviral proteases.

Program support requires USA citizenship or permanent resident status. Positions are available immediately. Applicants should send curriculum vitae, including citizenship status, and names, addresses and phone numbers of three references to: **Joanne Balitzky, Kimmel Cancer Center, 233 S. 10th Street, Room 910 BLSB, Philadelphia, PA 19107-5541. Telephone: 215-503-6687; Fax: 215-503-0622; e-mail: Joanne.Balitzky@mail.tju.edu.** We are an equal opportunity institution.



Thomas
Jefferson
University



NEW HUMAN GENOME VENTURE

JOB FAIR ANNOUNCEMENT

Perkin Elmer, the leading supplier of systems for life science research and related applications, and **Dr. J. Craig Venter** of The Institute for Genomic Research (TIGR), one of the world's leading genomic research organizations, have announced the formation of a new company to sequence the human genome and create the definitive source of genomic and associated medical information. This new venture will provide challenging new opportunities for individuals with experience in software engineering, computational biology, bioinformatics, research and development, DNA sequencing, molecular genetics, and management positions.

You are invited to join us for our inaugural Job Fair.

WHEN: Saturday, June 27, 1998

10:00 AM to 4:00 PM

WHERE: 9712 Medical Center Drive, Rockville, MD

This dynamic new organization is searching for talented scientific and laboratory professionals with experience who are interested in stepping into a unique growth opportunity at the ground level. We are seeking motivated individuals to help establish the world's premier DNA sequencing facility and producer of leading genomic and health care information products.

SCIENTIFIC POSITIONS:

B.S., M.S., or Ph.D.-level candidates are invited to attend.

SOFTWARE ENGINEERS:

B.S. and M.S.-level candidates are invited to attend.

For more information regarding this new organization, Perkin-Elmer, or TIGR, visit these websites (<http://www.perkin-elmer.com>) and (<http://www.tigr.org>). See also *Science* related article, Vol 280, 5 June 98, page 1540.

If you are interested in attending, please forward your résumé or C.V. with a cover letter indicating your intention to attend to:

Genomic Employment Search
P.O. Box 10057
Gaithersburg, MD 20898-0057
Fax (301) 838-0208

M/F, EOE, D/V

Molecular Pharmacology Assistant or Associate Professors

The University of Iowa, College of Medicine invites applications for faculty positions from highly qualified individuals. The successful applicants will be expected to maintain a dynamic extramurally supported research program, excel in teaching, and contribute actively to strong departmental and interdepartmental graduate programs.

The Department of Pharmacology is committed to the appointment and support of highly promising individuals applying modern approaches to study contemporary questions in signal transduction, neuroscience, and/or cancer biology. We seek to identify individuals who will complement Departmental and Collegiate strengths in signal transduction and in the identification of novel gene products, their expression and function (for faculty information: www.medadmin.uiowa.edu/~pharm).

Candidates with a Ph.D. and/or M.D. and an excellent record of research productivity and quality should submit before August 31, 1998, a curriculum vitae, summary of research accomplishments (including copies of key publications), description of future research plans, and the names of at least three referees to:

**Chair, Search Committee
Department of Pharmacology
College of Medicine
Bowen Science Building
The University of Iowa
Iowa City, IA 52242-1109**

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



**University of Pittsburgh
Department of Environmental
and Occupational Health**

Three Faculty Positions in Chemoprevention University of Pittsburgh

A major interdisciplinary mechanistic research program in chemoprevention of human disease, including but not limited to cancer, is under development in the Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh. Successful applicants will be expected to develop, or have in place, a strong independent research program in this field. It is anticipated that the program will develop through interactions and productive collaborations with other Department faculty whose primary research interests are: computational approaches to structural determinants of carcinogenicity and anticarcinogenicity, genetic predisposition to disease, mechanism-based biomarkers and molecular epidemiology, mechanisms of chemically-induced asthma, and biochemistry of free radicals and antioxidants. Interactions/collaborations with basic researchers/clinical researchers in other departments of the School and other schools in the University as well as members of the University of Pittsburgh Cancer Institute are also anticipated. The Department is seeking three distinguished scientists for tenured or tenure-stream faculty appointments at the Full/Associate and Assistant Professor levels.

The ideal candidates will possess outstanding records of scientific productivity, ability to attract external funding, and a commitment to excellence in teaching graduate students. Curriculum vitae and references should be sent to: **Herbert S. Rosenkranz, Professor and Chairman, Department of Environmental and Occupational Health, Graduate School of Public Health, 260 Kappa Drive, RIDC Park, Pittsburgh, PA 15238, FAX: (412) 967-6511; E-mail: stdtnaff@vms.cis.pitt.edu.** The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

ANNOUNCEMENT

25th Anniversary Conference NATIONAL FOUNDATION FOR CANCER RESEARCH

In Cooperation with
**Georgetown University Medical Center,
Office of Continuing Professional Education**
Present



Basic Science: Research for a Cure and Prevention

September 14-16, 1998
Georgetown University Conference Center
Washington DC

Topics include: *Molecular Genetics of Cancer, DNA Replication and Repair, Macromolecular Interactions: Lessons for Signaling and Drug Discovery, Small Molecule Gene Therapy, Unique and Novel Targets, Cellular Targets and Therapies, Theoretical Drug Design, Nutrition, Chemoprevention, and Vaccines*

Faculty include

Bruce N. Ames, PhD	Maurice R. Hilleman, PhD	W. Graham Richards, DSC
Jacqueline K. Barton, PhD	Wu Ki Hong, MD	Leo Sachs, BSc, PhD
Stephen J. Benkovic, PhD	Kathryn B. Horwitz, PhD	Alanna Schepartz, PhD
Esther H. Chang, PhD	David Housman, PhD	Harold A. Scheraga, PhD
Yung-Chi Cheng, PhD	Aaron Klug, PhD, NL	Paul Schimmel, PhD
Curt I. Civin, MD	Margaret Liu, MD	Helmut Sies, MD
Hector F. DeLuca, PhD	Doug Lowy, MD	Michael B. Sporn, MD
Peter B. Dervan, PhD	Cesar Milstein, PhD	Daniel D. Von Hoff, MD
Harold F. Dvorak, MD	Terence H. Rabbitts, PhD	I. Bernard Weinstein, MD
Donald M. Engelman, PhD	Alexander Rich, MD	Walter C. Willett, MD DrPH
Joel M. Gottesfeld, PhD		

For more information contact: Professional Meeting Planners,
Phone: 800-378-6857 x200 • E-mail: PMPMeeting@aol.com
EXHIBIT SPACE IS AVAILABLE

CONFERENCE

INVITATION TO REGISTER FOR SYMPOSIUM
AND CALL FOR POSTER ABSTRACTS

EMERGING THERAPIES FOR CHRONIC VIRAL HEPATITIS

OCTOBER 2-4, 1998
MONTREAL, QUEBEC, CANADA

Dr. LORNE TYRRELL, *Symposium Chairman*
UNIVERSITY OF ALBERTA, EDMONTON, CANADA

FOCUS

- Clinical investigations into the management of chronic hepatitis B and C infections, and related liver disease
- Recent advances in anti-viral therapy, epidemiology and pathogenesis of the viral infection
- Advances in the understanding of viral replication, novel molecular and immunologic approaches towards the treatment of the disease
- *In vitro* and *in vivo* model systems

LIST OF SPEAKERS

Marc Bilodeau	Heather Davis	Robert Lanford
Baruch Blumberg	Mark Feitelson	Bruce Malcolm
Nathaniel Brown	Jenny Heathcote	Thomas Michalak
Weizhong Cai	Lee Kaplan	Samir Mounir
Richard Colonna	Brent Korba	James Rooney
Lynn Condreay	Ann Kwong	Jesse Summers
Schlomo Dagan	Daniel Lamarre	J.-P. Villeneuve
		Yu-Mei Wen

ABSTRACT DEADLINE JUNE 30, 1998

For Registration and Other Information, Contact;

HEPATITIS SYMPOSIUM c/o Jpdl

TELEPHONE: 514-287-1070, FACSIMILE: 514-287-1248

E-MAIL: jpdj@jpdj.com, WEB SITE: www.hepatitis-symposium.org

Inspired by the Challenge. Dedicated to the Solution.



Gilead is an independent biopharmaceutical company that seeks to provide accelerated treatment solutions for patients and the people who care for them. We discover, develop and commercialize proprietary therapeutics for important viral diseases, including a currently marketed product, VISTIDE® (cidofovir injection), for the treatment of CMV retinitis, a sight-threatening viral infection in patients with AIDS. In addition, we are developing products to treat diseases caused by HIV, hepatitis B virus and influenza virus.

RESEARCH SCIENTIST Molecular Biology/Microbiology

Our Biology group has an immediate opening for a PhD Scientist to both discover and characterize new targets and evaluate novel therapeutics for the treatment of bacterial and viral infections. The successful candidate will apply molecular biology, protein biochemistry and microbial genetics techniques to validate new targets and work closely with medicinal chemists to optimize novel antibacterial compounds. A PhD (or equivalent) in Molecular Biology, Microbiology or Protein Biochemistry and at least 2 years post-doctoral experience, preferably in the field of bacteriology, are required. Job# B98-042.

RESEARCH SCIENTIST Drug Delivery and Metabolism

You will design and perform *in vitro* metabolism and transport studies using tissue preparations, purified enzymes, and cultured cells. Other specific duties include: developing novel *in vitro* methods for rapid evaluation of potential drug candidates; designing/conducting *in vivo* preclinical PK/ADME studies; developing HPLC methods; analyzing biological samples; and performing tissue extraction and metabolite isolation. Requires a PhD in Biochemistry, Pharmaceutical Sciences, or Analytical Chemistry and 2-4 years related experience. A strong familiarity with cell culture, *in vitro* transport studies in diffusion chambers, HPLC of biological matrices, *in vitro* and *in vivo* PK/ADME studies, pharmacokinetics, enzyme purification and kinetics is essential. Job# R98-125.

RESEARCH SCIENTIST Clinical Virology

We will rely on you to investigate the mechanisms of HIV drug resistance at the molecular and cellular level. Working as part of a scientific team, you will provide support for the clinical development of antiviral compounds. This will include the interpretation and presentation of virology data at scientific meetings and for publication. Your PhD and 2+ years of postdoctoral experience should demonstrate strong molecular biology, cell culture and specific virology skills. Familiarity with protein expression/purification techniques and experience working with viral and mammalian enzymes are also desired. Job# B98-045.

RESEARCH SCIENTIST Research Virology

You will join a group supporting the clinical development of an antiviral compound targeting the influenza virus. You will also be involved in the identification and evaluation of new targets for antiviral drug discovery. A PhD in Virology, Biochemistry, or Molecular Biology and a minimum of 2 years related postdoctoral experience are required. Solid technical skills in tissue culture, molecular biology (RT-PCR, DNA sequencing, cloning, site directed mutagenesis), and protein biochemistry/enzymology are essential. Strong written and verbal communication skills are desirable. Job# R97-048.

SR. RESEARCH SCIENTIST Analytical Chemistry

Leading a group responsible for analytical development and process control for Active Pharmaceutical Ingredients (API) manufacturing, you will operate an LC-MS instrument in support of chemical process development and impurity identification. You will also manage contract manufacturers on analytical activities (technology transfer, investigations, troubleshooting, etc). Requires an MS/PhD in Chemistry or equivalent and 8+ years of R&D experience in the pharmaceutical industry or in managing analytical laboratories. Expert MS skills, a working knowledge of organic synthesis, and a strong familiarity with GMP and current regulatory issues with respect to API are essential. Database and project planning skills are desirable. Job# R98-129.

RESEARCH SCIENTIST Analytical Chemistry

You will develop new analytical procedures to analyze novel drug substances and products. You will also identify observed impurities and degradation products and perform assay validation. Requires a PhD in Analytical Chemistry (or Organic) and up to 3 years related experience. Technical skills in chromatography and MS are desired. Experience in a GMP environment is beneficial. Job# R98-130.

At Gilead, we are committed to developing important treatments for a wide range of viral diseases, from influenza to AIDS. As you will discover, we are as committed to opportunity as we are to scientific achievement. Interested candidates should send a resume to: Human Resources, Job# ___, Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404, fax (650) 573-4800. Visit our website at www.gilead.com to learn more about our current opportunities. We are proud to be an equal opportunity employer.



GILEAD
S C I E N C E S

PEW

Latin American
FELLOWS
PROGRAM in the
BIOMEDICAL
S·C·I·E·N·C·E·S

A Program Sponsored by The Pew Charitable Trusts to support young scientists from Latin America for post-doctoral training in the United States. The Program is intended to provide such individuals with an opportunity to further their scientific knowledge, promote scientific exchange and collaboration between investigators in the U.S. and Latin America, and advance basic scientific research in Latin America. Ten Fellows will be selected in 1999. An award of \$50,000 will be provided as a salary stipend for the fellow during the period of training (\$25,000 per year for 2 years) and will be administered by the sponsoring U.S. institution. The sponsoring institution is expected to supplement the

salary stipend with at least \$5,000 each year and provide medical benefits for the fellow. Following the two-year fellowship, the Program will issue the sponsoring institution an additional \$35,000 award for the fellow to purchase equipment and supplies to establish a laboratory in his or her home country.

Applicants must have held a Ph.D. and/or M.D. degrees, or equivalent, for no more than five years as of October 1, 1998. Strong preference is given to applicants who have not had any previous training outside of Latin America. Applicants are not required to have a commitment of a position and laboratory space after the fellowship. However, the application requires a written statement of intent to return to Latin America. Fellows must have a confirmed position and laboratory space in Latin America by the end of the fellowship in order to obtain the \$35,000 portion of the award.

Fellows will be selected on the basis of their promise as outstanding investigators, as well as the scientific merit of their research proposal, their record of training and how well their interests coincide with the laboratory of their sponsor in the United States. Assistance with the identification of an appropriate laboratory and sponsor in the United States is available by contacting Silvia Montano de Jimenez, Program Coordinator at montano@itsa.ucsf.edu before August 15, 1998.

The program will accept applications from Mexico, Central and South America. Applications may be obtained by the Regional Committee chairperson in your country listed here or from our website at <http://futurehealth.ucsf.edu/pewlatin.html>. The application deadline is October 1, 1998. Winners will be notified in April 1999 and the fellowship should begin no later than August 1999.

APPLICATION DEADLINE IS OCTOBER 1, 1998

ARGENTINA:

Israel Algranati,
Fundación Campomar,
Av. Patricia Argentinas 435,
1405 Buenos Aires, Argentina
Tel: 863-4018 Fax: 865-2246
e-mail: algra@iris.iib.uba.ar

BRASIL:

Carlos E. Rocha Miranda,
Academia Brasileira de Ciencias,
Rua Anfilofio de Carvalho, 29, 3º Andar, 20030-060
Rio de Janeiro, RJ - Brasil
Tel: 220-4794 Fax: 240-4695
e-mail: cerm@abc.org.br

CHILE:

Manuel Kukuljan, Ph.D.
Universidad de Chile
Departamento de Fisiología y Biofísica
Casilla 70005 Santiago 7 Chile
Tel: 2-678-6310 Fax: 2-777-6916
e-mail: kukuljan@bitmed.med.uchile.cl

MEXICO:

Hugo Aréchiga,
UNAM, Ciudad Universitaria
04510 Mexico, D.F.
Tel: 622-0725 Fax: 550-8859
e-mail: arechiga@servidor.unam.mx

ALL OTHER COUNTRIES:

Silvia Montano de Jimenez
The Pew Latin American Fellows Program,
1388 Sutter Street Suite 805,
San Francisco, CA 94109
Tel: 415-476-5116 Fax: 415-476-4113
e-mail: montano@itsa.ucsf.edu

The Neurosciences Institute (NSI) is an independent, not-for-profit organization at the forefront of research on the brain. Located in La Jolla, it is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

ASSOCIATE FELLOW IN EXPERIMENTAL NEUROBIOLOGY

Applications are invited for the position of Associate Fellow in Experimental Neurobiology, with an emphasis on neuropharmacology. The NSI's goal is to increase understanding of brain processes at several organizational levels, from the molecular to the cognitive. A current focus is on the action and pharmacological manipulation of neuromodulatory systems with diffuse projections, such as the noradrenergic, serotonergic, cholinergic, dopaminergic, and histaminergic systems. Successful candidates will be expected to collaborate with other Fellows in Experimental Neurobiology and to take advantage of opportunities for scientific exchanges with Fellows in Theoretical Neurobiology.

Applicants should be at the assistant professor level with strong backgrounds in neuropharmacology and behavioral neuroscience. Positions are now available. Fellows receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: **Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

JUNIOR FELLOW IN THEORETICAL NEUROBIOLOGY

Applications are invited for positions as Junior Fellow in Theoretical Neurobiology. Since 1987, the NSI has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and the analysis of functional interactions among brain areas using modern neuroimaging techniques. Advanced supercomputer facilities are available. Junior Fellows in Theoretical Neurobiology will be expected to collaborate with Senior Fellows in Theoretical Neurobiology and will have daily opportunities to interact with Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral level with strong backgrounds in experimental or theoretical neuroscience, neuroimaging, or related fields. Experience in computer modeling or statistics is especially welcome. Positions are now available. Fellows receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: **Dr. Olaf Sporns and Dr. Giulio Tononi, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

MUSC

MEDICAL UNIVERSITY
OF SOUTH CAROLINA

Faculty Positions

Cancer Experimental Therapeutics

Tenure-track faculty positions are available at the level of assistant/associate professor as part of the expansion of the Hollings Cancer Center, Medical University of South Carolina. Applications are invited from individuals with Ph.D. and/or M.D. degrees whose research activities will complement our existing Experimental Therapeutics Program. Areas of particular interest are cell cycle and transcriptional control mechanism related to anticancer drug action and resistance. Laboratory-based clinical investigators interested in conducting translational research in these areas are also encouraged to apply. Preferred candidates will be principal investigators on current peer-reviewed research grants. Appointments will be made within academic departments where mutual interests exist. Highly competitive start-up packages are available, which include support for the purchase of major equipment.

Applicants should send a curriculum vitae, description of research interests, and the names of three references to:

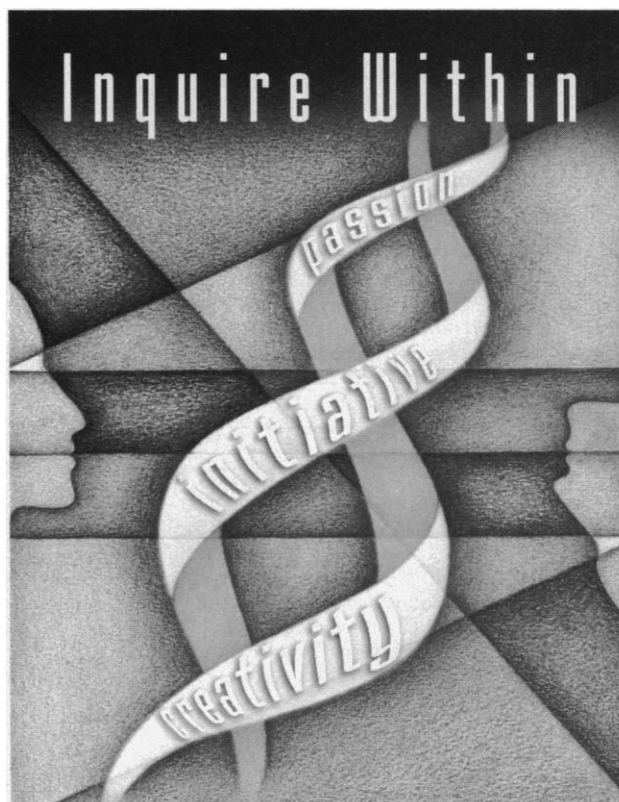
Daniel J. Fernandes, Ph.D., D.Sc.
Associate Director for Basic Research
Hollings Cancer Center
Medical University of South Carolina
171 Ashley Avenue
Charleston, SC 29425-2850

The Medical University of South Carolina is an Equal Opportunity Employer.

Genentech's people share some pretty uncommon traits. Not surprising when you consider the scope of our mission – creating breakthrough medicines for conditions like cystic fibrosis, stroke, growth disorders, cancer and heart attacks. It demands a very special kind of person. Someone who will take risks, accept responsibility, and constantly seek creative solutions.

Do you have the traits to contribute to making our vision of longer, healthier lives for thousands of people a reality? Consider what you expect from a career and from yourself. Expect the extraordinary? Then share your traits with us.

www.gene.com



POSTDOCTORAL OPPORTUNITIES

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

Antibody & Bioassay Technology

This postdoctoral fellowship will focus on the biology and structure-function of Apo-2 and Apo-2 ligand. In addition, mAbs to Apo-2 will be evaluated and engineered to induce apoptosis. Experience in molecular biology, immunology or related areas is preferred. See J. Immunol. 156:1782 (1998); Methods in Enzymology 288:15 (1997); Cancer Research 56:663 (1996); J. Immunol. 155:2587 (1995); J. Immunol. 153:5682 (1994). Manager: Dr. Jin Kim. Job Code SCI229

Cardiovascular Research

This postdoctoral fellowship will investigate the regulation of blood vessel growth by vascular endothelial growth factor (VEGF) and by novel factors applying molecular, cellular and in vivo approaches. Requires a strong background in molecular biology or cellular biology. See Nature 362:841-844 (1993); Nature 380: 439-442 (1996); EMBO J. 15:4919-4927 (1996); Endocr. Rev. 18:4-25 (1997); Nature Med. 3:336-340 (1998). Manager: Dr. Napolcon Ferrara. Job Code SCI033

Molecular Oncology

A position is available to research structure-function studies of ErbB receptor-ligand interactions and their relevance to human cancer. Prefer PhD in molecular biology or biochemistry possessing strong molecular biology skills. See: J. Biol. Chem. 273:11667-74; Oncogene 15:1385-1394 (1997). Manager: Dr. Mark Sliwkowski. Job Code SCI612.

Molecular Oncology

Two postdoctoral fellowships are available in the area of molecular design for tumor targeting. One will focus on engineering human enzymes and human catalytic antibodies for prodrug activation. Another postdoc will create antibody and ligand fusion proteins with human nucleases. Experience in molecular biology, protein biochemistry, enzymology and cancer biology is preferred. See Cancer Res. 55:6370 (1995); Protein Engin. 8:1057 (1995); Bio/Technology 14:192 (1996); Protein Eng. 9:617. (1996); J. Mol. Biol. 270:26 (1997); Protein Sci. 6:781. (1997); Dall'Acqua et al Biochemistry (in press). Manager: Dr. Paul Carter. Job Code SCI601.

Neuroscience

A position is available in the area of developmental neurobiology for an outstanding post doctoral fellow. The successful candidate will utilize advanced molecular, cellular and genetic approaches to identify and study genes that control commitment and differentiation in the central nervous system. See Cell (1995), 80:95; Nature (1995), 373:339; Science (1995), 267:455; Nature (1996), 384:126; Nature (1996) 382:80; Nature (1996), 382:76; Nature (1997), 387:717; Neuron (1997), 19, 15-26; Nature (1998) 391:90; Neuron (1998) 19, 15-26; Cell (1998) 93, 755-766. Manager: Dr. Arnon Rosenthal. Job Code SCI225.

Bioorganic Chemistry and Immunology Research

This postdoctoral fellowship will focus on protein structural analysis and design in the application of re-engineered proteins to small-molecule drug discovery. Requires a Ph.D. degree in Chemistry or Biochemistry with an emphasis in peptide and protein structural analysis. Experience in biophysical chemistry, molecular biology, protein chemistry or peptide synthesis is desirable. See Science 260:1937-42 (1993); J. Amer. Chem. Soc. 116: 5069-83 (1994); J. Immunol. 157:4986-4995 (1996); Biochemistry 36:4775-4781 (1997); J. Med. Chem. 40:3359-68 (1997). Managers: Dr. James Marsters and Dr. Leonard Presta. Job Code: SCI078

Molecular Biology

This postdoctoral position will provide the opportunity to exploit existing genomic technologies to identify novel secreted proteins. In addition, original approaches to the identification of novel secreted genes in genomic DNA will be developed. The focus of this work will be the prediction of novel secreted proteins from primary genomic sequence data and the use and design of bioinformatics tools. The ideal candidate will have a PhD in molecular biology or related field with 0-3+ years' experience in the area of genomics and the extraction of information from genomic sequences. See: PNAS 93:7108-7113 (1996). Manager: Dr. Audrey Goddard. Job Code SCI174.

Our progressive benefits package includes full medical/dental/vision, 3 weeks vacation, stock purchase plan and health club membership. Send your resume, indicating Job Code, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces. You may e-mail your resume indicating Job Code to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes.

Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

Genentech, Inc.

incredible people
extraordinary science

Biologists

Enhancing and preserving the quality of life. This is the commitment that Merck & Co., Inc., stands on. Recently ranked by *Fortune* in the top 10 of "The 100 Best Companies to Work for in America," we focus on developing and manufacturing innovative health products. Join us in our adventure of discovery. We currently have challenging opportunities available in our Genetic and Cellular Toxicology Department.

MOLECULAR BIOLOGISTS

We have immediate openings for Molecular Biologists. To qualify, you must have a BS or MS degree in a related field along with 2 years of laboratory experience. Successful candidates will be proficient in a broad range of molecular and cell biology techniques. A strong academic background and demonstrated excellence in laboratory techniques are essential. **CODE: D-162A**

COMPUTER TECH/BIOLOGIST

We are seeking an individual with computer expertise and a laboratory background to work in computer support for a network that includes data collection from laboratory instruments for over 50 users. Support includes maintenance of Oracle databases, development of test plans and documentation of new computer systems, as well as support of existing custom systems. The laboratory work requires testing for chromosome damage as part of safety testing for drug registration. Tissue culture and microscopic analysis of cytogenetic preparations is also required. (Training in cytogenetics is available.)

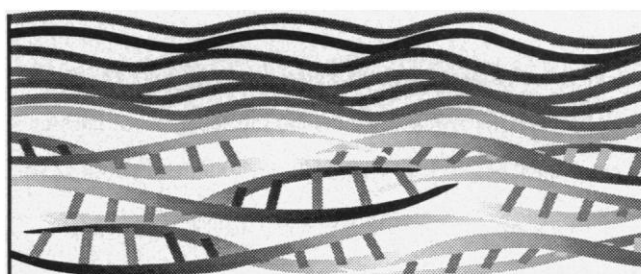
To qualify, you must possess a BS in computer science/biology/biochemistry and two or more years of lab experience. Demonstrated aptitude and experience in computer systems is necessary, particularly with Oracle, Windows NT, client/server environments, Microsoft Office suite and custom applications documentation and testing. Familiarity with MACs would be beneficial. The successful candidate will be extremely organized and able to interact effectively with people who have various levels of computer and laboratory expertise. **CODE: D-164**

Merck offers opportunities for professional growth and an excellent compensation and benefits package. For immediate consideration, send your resume and salary requirements, indicating appropriate job code #, to: **Merck & Co., Inc., WP42-2, PO Box 4, West Point, PA 19486.** Only candidates selected for interviews will be contacted.

We are an equal opportunity employer.



WHERE THERE'S LIFE, THERE'S MERCK.



WEST COAST CAREERS IN BIOTECHNOLOGY & PHARMACEUTICALS

A SCIENCE Advertising Supplement

Issue Date: 17 July 1998

Space reservation deadline: 30 June 1998

In this 17 July issue, SCIENCE take readers into labs and offices of U.S. companies that see no limits, only an ocean of unlimited opportunity.

Benefits for full-page advertisers:

- **PRIME POSITIONING** for your full-page ad in the editorial section of the SCIENCE West Coast Careers advertising supplement.
- **FEATURE LISTING** for your organization in the full-page advertiser index that will appear in both SCIENCE and SCIENCE Online.
- **FREE LINK** from your ad featured on SCIENCE Professional Network to your e-mail or website address.

Benefits for all advertisers:

- **EXPOSURE TO OVER 159,000** SCIENCE subscribers.
- **FREE INTERNET POSTING** of your ad on SCIENCE Professional Network for two weeks.

To reserve your space or for more information, contact:

U.S.: Gabrielle Boguslawski	EUROPE: Debbie Cummings
Tel: (718) 491-1607	Tel: +44 (0) 1223 302067
Fax: (202) 289-6742	Fax: +44 (0) 1223 576208
E-mail: science_classifieds@aaas.org	E-mail: european_ads@science-int.co.uk
JAPAN: Mashy Yoshikawa	AUSTRALIA: Keith Sandell
Tel: (+81) 3 3235-5961	Tel: 011-612-99222977
Fax: (+81) 3 3235-5852	Fax: 011-612-99221100

Science
www.sciencemag.org



Reach New Heights of Research at Parke-Davis

Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, is a world-class company focused on technological advances to benefit the world. Headquartered in **Ann Arbor, MI** in a unique campus-like setting, Parke-Davis offers outstanding opportunities to reach new heights of research with a:

Postdoctoral Fellow

You will study intracellular signaling mechanisms that mediate the initial stages of heart failure and will participate in basic research defining nuclear targets for signaling pathways activated in the diseased heart (see *Proc. Natl. Acad. Sci* 94: 7543; *Circulation*, 96: 3943, *Cell* 93: 215 and *Mol. Cell. Biol.* 18: 3120) in the laboratory of Dr. Bruce Markham. Applicants are expected to publish results and to participate in regular journal clubs, research seminars and joint lab meetings. A Ph.D. in one of the biological sciences or an M.D. degree with significant research experience is required. Preference will be given to those with a strong record of publication in peer reviewed journals with demonstrated experience in the molecular and cellular biology of eukaryotes. Experience in one of the following: transgenic animals, whole animal physiology, in situ hybridization, immunocytochemistry or protein purifications would be a plus. Job Code: CJM-985444

Postdoctoral Fellow

You will investigate the effects of highly specific small molecule tyrosine kinases inhibitors directed against angiogenesis growth factor receptors in vitro and in vivo. Applicants should be a recent Ph.D. graduate in biochemistry, cell biology or a related discipline with a background in tissue culture, biochemistry, molecular biology (Western, Southern and Northern Blotting) and experimental therapeutics. Familiarity with cancer biology and in vivo tumor models would be a plus. Job Code: CJM-985435

We offer an attractive compensation package and a positive environment that encourages continuous growth and success. Qualified candidates please mail, fax or e-mail your resume*, indicating the Job Code of interest, **Parke-Davis Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: (310) 337-3367. E-mail: parkedavis@isearch.com**

Equal opportunity in action.
Smoke-free work environment.

*Please submit resume on laser-quality white paper, with legible 10 point or larger type, and avoid boldface, italics, borders, etc.

Warner-Lambert "Pharmaceutical Company of the Year" -Med Ad News1997

Visit Our Website at:
www.warner-lambert.com

 **PARKE-DAVIS**

The
Search For
Cures Begins
With A Search
For The
Best.

Pfizer is involved in some of the most critical research in the world today. As a Fortune 100 company, we have established a product pipeline that is unparalleled, and an intellectual, collaborative environment that inspires achievement. Join us and become a part of the cure.

Located on the shores of historic Groton, CT, Pfizer offers a high quality of life in close proximity to New York City, Providence and Boston. In addition to a fast-paced, yet collegial environment, we offer very competitive salaries and excellent benefits including relocation assistance. For confidential consideration, please forward resume to: **Employee Resources, Pfizer Inc, Job Code #_____, Central Research Division, Eastern Point Road, Groton, CT 06340. For more information about Pfizer, see us on the Internet at: <http://www.pfizer.com>.** We are an equal opportunity employer M/F/D/V.

BS/MS Scientist Allergy and Respiratory Group

A BS/MS Scientist is sought to develop models, test hypothesis and perform assays. Must possess experience with in vivo pharmacology, physiology or related discipline. Experience with cell infiltration models, monitoring of physiological parameters and measurement of cytokines and mediators in biological fluids is desired. **Job Code: 2708**

BS/MS Protein Structure Chemist

An opportunity exists for a highly motivated and talented assistant scientist in the Protein Structure Group. The successful candidate will work in a setting of macromolecule x-ray crystallography and biomolecular NMR spectroscopy focused on integrating structural information into the drug discovery process. As a key member of our team, you will apply state-of-the-art technology to isolate and prepare proteins for use in structural studies. The qualified candidate will have a BS/MS degree or equivalent in biological sciences and experience in protein purification, characterization and crystallization techniques. **Job Code: 2709**

Exploratory Medicinal Sciences Post Doctoral Position

Structure and Function of Phosphorylases

We seek a scientist interested in a Post-Doctoral opportunity targeted at understanding the atomic basis of isozyme specific regulation of human glycogen phosphorylases by phosphorylation and allosteric effectors. These studies will focus on the X-ray structural determination of phosphorylases in different functional states and correlation of the structural results with kinetic and biochemical analyses.

This position will be 36 months in length, with the first 18 months to be spent at Pfizer and the second 18 months to be spent at the University of California at San Francisco. This jointly sponsored, bicoastal position offers a unique opportunity to experience the research environments of both a leading pharmaceutical company and the University of California.

The successful applicant will have a strong background in all aspects of X-ray crystallography as well as expertise in the expression, purification and biochemical characterization of proteins. Publications in these areas are required.

Job Code: 2710



We're part of the cure.

The Science of Agricultural Genetics

SENIOR RESEARCH ASSOCIATE (Job #QT-812S)

Pioneer Hi-Bred International, Inc. is seeking applicants for a Senior Research Associate - Maize Transformation located in Johnston, Iowa. This position will be an integral part of the Maize Transformation Lab which includes technology development of corn transformation with emphasis on elite line transformation. The primary duties will be the development of new transformation technology and/or the enhancement of existing capabilities. The position will prefer experience in monocot/corn tissue culture and transformation and a basic knowledge of molecular biology and genetics as well as experience in meeting company technical and business objectives. A MS degree or equivalent experience in Cell Biology, Plant Biology or a related field is desired. The applicant must have at least four years of relevant research experience and must be experienced in transformation/cell biology in corn and/or in other plants. Demonstrated ability to complete projects in a timely manner is a must. In addition, a working knowledge of analysis of transgenics in plants would be an asset. Strong interpersonal skills will be required to develop collaborations both within Pioneer Hi-Bred's extensive research program and external public and private organizations. The applicant must have experience in using computers, especially for report writing, experimental design, result analysis and data summary, use of database(s) and experience in running field tests of transgenic organisms.

Pioneer Hi-Bred International, Inc. offers competitive salaries and excellent, comprehensive benefits. Johnston/Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages. For confidential consideration send 3 copies of your cover letter and current resume, indicating job number: Pioneer Hi-Bred International, Inc., Attn: Human Resources-Research P.O. Box 1004, Johnston, IA 50131-1004; or e-mail jobsresearch@phibred.com. Application deadline is July 3, 1998. Visit our website at <http://www.pioneer.com>.

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



**PIONEER HI-BRED
INTERNATIONAL, INC.**

*An Equal Opportunity
Employer*

POSTDOCTORAL POSITIONS

Center for Molecular Medicine, Maine Medical Center Research Institute

Several postdoctoral positions are available to participate in research programs focused on understanding protein trafficking, signal transduction pathways regulated by growth factors, cytokines and cell fate determinants, molecular mechanisms of tissue/organ repair and the molecular genetics of human bone development and neoplasia. Applicants with experience in cell biology, biochemistry and molecular biology are encouraged to apply. Salary will be commensurate with experience.

Interested individuals should send a current curriculum vitae and three letters of reference to: **Dr. Volkhard Lindner, Search Committee Chair, Center for Molecular Medicine, Maine Medical Center Research Institute, 125 John Roberts Road, Suite #12, South Portland, ME 04106.** We are an equal opportunity employer strengthened by the diversity of our professional community.



Maine Medical Center

*The Trusted Choice
The MaineHealth Family
An Affirmative Action Employer.*



THE INSIDE TRACK

The best way to get your foot in the door is to get there first. SCIENCE's new e-mail Job Alerts service allows you to receive advanced notification about new jobs appearing on SCIENCE Professional Network. If you're actively looking for a new position, or just testing the market, here's why you need to make Job Alerts part of your search...

- **FAST:** Each week you'll receive e-mail notification about specific jobs on SCIENCE Professional Network that match your search criteria.
- **FREE:** There's no charge for this service. All you have to do is register for the Job Alerts. Go to www.sciencemag.org — click on SCIENCE Professional Network — then click on Job Alerts.
- **EASY:** Simply select the appropriate criteria for positions that fit your job search profile on the Job Alerts registration form. After you've completed the form, the Job Alerts system automatically notifies you via e-mail about new positions. Hundreds of new positions are posted each week.

SCIENCE JOB ALERTS

Go to www.sciencemag.org—click on SCIENCE Professional Network—then click on Job Alerts



**Chief, Cancer Genetics Branch
Division of Cancer Biology
National Cancer Institute, NIH**



The Division of Cancer Biology (DCB), National Cancer Institute, National Institutes of Health, is seeking a scientist with experience in research and research program administration for this challenging leadership position in the newly created Cancer Genetics Branch. The Cancer Genetics Branch promotes and supports, through a program of extramural grants and contracts, discovery of the underlying genetic/epigenetic mechanisms of the origins and progression of cancer. In addition, this Branch facilitates the transfer of research findings to areas of application, and therefore works collaboratively with many other program areas of the National Cancer Institute and with other NIH programs.

The DCB is seeking an individual with 1) broad current knowledge of science relevant to basic cancer genetics and molecular biology, 2) ability to plan, implement, and lead scientific programs, and 3) experience and skill in working collaboratively with scientific and administrative staff. This position is ideal for someone wishing to participate in promoting a national program of basic cancer genetics research and developing new programs to accelerate research progress in this field.

The salary range is \$77,798–101,142 at the GS-15 level. *Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, membership or nonmembership in an employee organization. U.S. citizenship required.* For further information, please contact **Norka Ruiz Bravo, Ph.D.**, at **301-435-5225** or **nb9b@nih.gov**.

Send letter of interest and C.V. by July 26, 1998, to :

**Norka Ruiz Bravo, Ph.D.
Deputy Director
Division of Cancer Biology
National Cancer Institute
6130 Executive Boulevard, Room 500
Rockville, MD 20892**

Visit the DCB Website at <http://www.nci.nih.gov/dcb/dcbhom/htm>.

POSTDOCTORAL POSITIONS REGULATION OF GENE EXPRESSION

The University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Department of Microbiology and Molecular Genetics has positions available immediately to study:

Mechanisms of gene transcription in trypanosomes. Molecular parasitology is a growing field; our work on transcriptional regulation (J. Biol. Chem. 273:33344) is uncovering protein-DNA and protein-protein interactions involved in these processes. Experience in molecular biology is required. Reply to: **Vivian Bellofatto Ph.D.** (email: bellofat@umdnj.edu)

Regulation of gene expression in yeast. We are analyzing changes in the activity of a DNA-binding transcriptional regulator as a function of its post-translational modifications in response to a pathway-specific inducer (Genetics 142:1069). Familiarity with molecular biology, protein biochemistry and immunological methods is an asset. Reply to: **Marjorie Brandriss, Ph.D.** (email: brandris@umdnj.edu)

Cell signaling and gene expression in yeast. Two postdoctoral positions are available to study (1) the mechanism by which cAMP-dependent protein kinase regulates transcriptional factors involved in stress response and growth (Mol. Cell. Biol. 15:6854) and (2) the regulation and function of a yeast homolog of mammalian voltage-gated calcium channels (Mol. Cell. Biol. 17:6339). Reply to **Stephen Garrett, Ph.D.** (email: garretst@umdnj.edu)

Interested applicants should send curriculum vitae and three letters of reference to the attention of the appropriate faculty member in the Dept.



of Microbiology and Molecular Genetics (MSB-F607), UMDNJ-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103-2714. UMDNJ is an Affirmative Action Equal Opportunity Employer M/F/D/V and is a member of the University Health System of New Jersey.



POSTDOCTORAL POSITION Cell Biology/ Tissue Engineering Boston Area

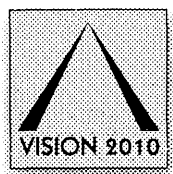
Postdoctoral position available to study regulation of cell physiology and differentiation in organotypic skin cultures. This highly motivated scientist will provide the basic science foundation to support state-of-the-art tissue engineering technology. Two year commitment with potential for additional one year extension and/or possibility of conversion to staff position. Appropriate candidates must have a Ph.D. in cell or developmental biology and experience in mammalian cell culture. Experience in one or more of the following highly desirable: lipid chemistry, in situ hybridization, and fluorescence activated cell sorting.

Please send your resume to: **Director of Human Resources, Job Code: PDSM, Organogenesis Inc., 150 Dan Road, Canton, MA 02021. Fax: (781) 575-9374.** No phone calls, please. We're an equal opportunity employer.

 **Organogenesis**

www.organogenesis.com

THE BAYER FACTS:



Bayer:
**A premier
healthcare
company for
the 21st century.**

OPPORTUNITIES WITH BAYER

*In the highly competitive global pharmaceutical marketplace, there are many "Bayer Facts" that distinguish us as a leader. To name a few, we are part of Bayer Corporation, a \$32 billion international diversified organization and one of the most broadly-based healthcare companies in the U.S. Our Clayton, NC facility is the largest of its kind in the world and is primarily involved in the manufacture of Biological Products. These positions are based out of our **CLAYTON, NC** facility which is located near Raleigh, NC.*

Currently, the following three opportunities are available in our Process Development Group which will contribute to the development of new purification processes such as chromatography, membrane separation, and filtration for plasma proteins.

MANAGER OF PROCESS DEVELOPMENT (SR. STAFF SCIENTIST)

The position will interface with project engineering, play a major role in the realization of new processes, and supervise process development scientists and engineers. To qualify, we require a Ph.D in Chemical Engineering with minimum 6-8 years experience in manufacturing required, preferably within pharmaceutical or biotechnology industry. Familiarity with GLP/GMP, experience in project engineering, as well as extensive working knowledge in protein chemistry. Strong proven leadership experience also required. RESPONSE CODE: 98-72

PROCESS DEVELOPMENT SCIENTIST

The position will interface with all Technology Groups and play a major role in the realization of new processes. We require a Ph.D/MS degree in Biochemistry, Chemical Engineering or related field; minimum experience of 2-4 years in manufacturing, preferably in the pharmaceutical industry or biotechnology. Must be familiar with GLP/ GMP rules and conditions. A working knowledge of protein chemistry is preferred. RESPONSE CODE: 98-86

ASSISTANT/ASSOCIATE PROCESS DEVELOPMENT SCIENTIST

The position will interface with project engineering and play a major role in the commercialization of new processes. We require a BS with 4+ years, MS with 2+ years or a Ph.D in Chemical Engineering with experience in process development or manufacturing, preferably in the pharmaceutical or biotechnology industries. Experience in filtration, chromatography, centrifugation and sterile processing is strongly desired. Must have demonstrated engineering skills. Familiarity with GLP/ GMP conditions, protein chemistry and project engineering is preferred. RESPONSE CODE: 98-01

Please forward your resume (indicating response code) including salary history to: **SK/Human Resources Representative, Bayer Corporation, Pharmaceutical Division, P.O. Box 507, Clayton, NC 27520.**

No agencies or phone calls please. For more information on Bayer, search <http://www.careermosaic.com/cm/bayer/>

An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to enhancing and maintaining cultural diversity within our work environment.



**Pharmaceutical
Division**

Biological Products

PLANT BIOLOGIST

Applications are invited for a faculty position at The Carnegie Institution of Washington, Department of Plant Biology at Stanford University. We are particularly interested in identifying an outstanding colleague, at any level of seniority, with basic research interests in some aspect of plant biology that may contribute toward the understanding or amelioration of environmental problems. In this context, we will consider applications from individuals with interests ranging from biotechnology to ecology. For instance, we envision that advances in understanding the molecular mechanisms of plant growth and development may permit the development of highly productive crops that require minimal inputs. We also envision that improved understanding of ecosystems may facilitate the design of improved strategies for biodiversity conservation.

The Carnegie does not have a system of academic rank, but salary will be commensurate with experience and level of accomplishment. Applications should include a curriculum vitae, three reprints of representative publications, and a concise statement of present and future research plans.

Complete applications and three letters of recommendation should be received no later than August 15, 1998. Please mail applications to **Chris Somerville, Director, Carnegie Institution of Washington, 260 Panama Street, Stanford, CA 94305.**

The Carnegie Institution of Washington is an Equal Opportunity Employer.

*What's
the shortest
distance
between
two points?*

● you

● great career
opportunities

SCIENCE
**PROFESSIONAL
NETWORK**

www.sciencemag.org
Select SCIENCE Professional
Network from the menu

International Symposium at the National Institutes of Health:

"TOWARD A MOLECULAR UNDERSTANDING OF CRANIOFACIAL MORPHOGENESIS"

November 22–24, 1998

Natcher Conference Center, NIH, Bethesda, MD

Topics will include: • Molecular genetics • Genomics •

- Signaling networks that control patterning •
- Cell-cell and cell-matrix interactions •
- Cell lineage determination and differentiation •
- Environmental effects • Animal models •
- Human craniofacial syndromes •

Speakers include: **M. Bronner-Fraser, M. Capecchi, I. Dawid, S. Fraser, E. Jabs, R. Krumlauf, A. Lumsden, R. Maas, G. Martin, R. Maxson, M. Muenke, J. Murray, B. Olsen, I. Thesleff**

Major invited poster session

Further information and registration by Internet: <http://KEVRIC.com/nidrwa21.htm> or contact **The KEVRIC Company, Inc., Attention: EAL/WA21, 8401 Colesville Road, Suite 610, Silver Spring, MD 20910 Phone: (301) 588-6000; Fax (301) 588-1777.**

CALL FOR NOMINATIONS FOR THE 1999 GAIRDNER FOUNDATION INTERNATIONAL AWARDS

The Gairdner Foundation in Toronto, Canada invites the international scientific community to nominate candidates for The Gairdner Foundation International Awards. The first awards were made in 1959 and 240 scientists have since received the Award. The awards consist of \$30,000 CAD and a sculpture, *Le Coeur*, to each individual winner from a diversity of fields for outstanding discoveries or contributions to medical science. A joint award for some discoveries may be given, usually to no more than two individuals.

Nomination letters shall describe the key role of the nominee(s) in a medical advance (discovery or contribution) and should be accompanied by a curriculum vitae and two supporting letters that detail a major discovery and compare it with the work of other major scientists in the field. The deadline for nominations for the 1999 awards is September 30, 1998. The Awards will be announced in the summer of 1999 and the awards presentation will be held October 20–22, 1999.

Address nominations to:

John H. Dirks, M.D.
President, The Gairdner Foundation
Suite 220, 255 Yorkland Blvd.
Toronto, ON M2J 1S3 Canada
Tel: 416 493 3101
Fax: 416 493 8158
E-mail: 110023-1345@compuserve.com

In 1999, The Foundation will celebrate its 40th Anniversary and will hold a major international symposium Oct. 19–22, 1999 in Toronto involving Gairdner Foundation Awardees.

FACULTY POSITIONS

Center for Molecular Medicine Maine Medical Center Research Institute

The newly created Center for Molecular Medicine is currently undergoing a vigorous expansion. The Center's major focus will be on the molecular mechanisms of human disease including diseases of the cardiovascular system, bone and mineral metabolism, and cancer. Applications are invited at the Assistant or Associate Member level. Individuals using modern cell, molecular and/or genetic (vertebrate or invertebrate) methods to elucidate molecular mechanisms of human disease are encouraged to apply. Center faculty will have access to excellent resources including generous start-up funds and space in a new state-of-the-art research building presently under construction. In addition, the successful candidate will be encouraged to interact with existing clinical programs at the Maine Medical Center.

The successful candidate will be expected to establish an independent basic research program that will attract extramural funding and will complement existing research programs at the Center. These include protein trafficking pathways, tumor development, vascular remodeling, functional characterization of growth factor, cytokine and cell fate determinant signaling pathways, and the molecular genetics of human bone development, tissue/organ repair and neoplasia.

Rank and salary will be commensurate with qualifications and experience. The Portland area offers an environment rich in cultural and recreational opportunities. Applicants should send a curriculum vitae, three letters of reference and a brief statement of research interests to: **Dr. Robert E. Friesel, Search Committee Chair, Maine Medical Center Research Institute, 125 John Roberts Road, Suite #12, South Portland, ME 04106.** We are an equal opportunity employer strengthened by the diversity of our professional community.


Maine Medical Center
The Trusted Choice
The MaineHealth Family
An Affirmative Action Employer.



SUNY Brooklyn

Research Opportunities Post-Doctoral Positions

Dr. Brehon C. Laurent: Molecular genetics and biochemistry of chromatin-remodeling complexes and the connection to the mitotic cell cycle in budding yeast. Experience in yeast genetics, protein biochemistry, or molecular biology required.

Dr. Maureen McLeod: Use of biochemistry and classical and molecular genetics to study exit from the mitotic cell cycle in fission yeast. Experience with protein expression, protein biochemistry or phosphorylation assays is preferred.

Dr. Miriam H. Feuerman: Genetic and molecular biological approaches to study regulation of gene expression during liver regeneration. Experience in manipulation of genomic DNA and/or DNA-protein interactions preferred.

Dr. Gladys Teitelman: Regeneration of pancreatic insulin β cells in models of Type 1 Diabetes Mellitus. Regulation of adult β stem cell differentiation *in vivo* and *in vitro*.

Please send cover letter indicating position of interest, curriculum vitae and 3 letters of reference to:

Ms. Roseann Lindeza
Department of Microbiology and Immunology
SUNY HSCB
450 Clarkson Avenue, Box 44
Brooklyn, NY 11203
(718) 270-2638

SUNY HSCB is an Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITIONS NEW YORK MEDICAL COLLEGE

The Department of Biochemistry and Molecular Biology invites applications from candidates with strong biochemical backgrounds and evidence of outstanding promise as scholars for two tenure-track faculty positions. Candidates should have the Ph.D. degree and have developed a strong research direction during their postdoctoral training. Preference will be given to applicants at the **ASSISTANT PROFESSOR** level although exceptional applications for appointment at the level of **ASSOCIATE PROFESSOR** will be considered. The research areas are open but we would like to recruit at least one individual with a strong background in protein structure-function relationships whose research focus will be complementary to the current research in the Department. Successful candidates will be expected to develop vigorous research programs and must be prepared to make a strong commitment to excellence in the teaching of medical and graduate students. New York Medical College is situated on an attractive campus in Westchester County, about 20 miles north of New York City. The College is committed to the expansion and development of the Department, and renovated space and start-up funding will be provided to the successful candidates. Review of applications will begin on July 1, 1998, and the positions will be available from the fall of 1998. Applicants should provide a curriculum vitae, a narrative statement of research accomplishments and future research directions, reprints of recent papers, and the names of three references to: **Dr. Ernest Y. C. Lee, Chairman, Department of Biochemistry and Molecular Biology, New York Medical College, Valhalla, NY 10595.**

New York Medical College is an Equal Opportunity Employer.

ASSISTANT PROFESSOR CARDIOVASCULAR-RENAL PHYSIOLOGY

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

FACULTY POSITION HUMAN MOLECULAR GENETICS

Creighton University invites applications for a tenure-track faculty position at the **ASSOCIATE PROFESSOR** or **PROFESSOR** level. The appointment could be in one of several departments depending on the interest of the successful applicant. The candidate is expected to maintain a nationally competitive funded program in molecular genetics related to cancer. Candidates should hold the M.D. and/or Ph.D. degree and have experience with germ-line mutations and linkage analysis in cancer genetics research. There will be an opportunity to collaborate with an existing program, which has an extensive resource of cancer-prone families. A competitive salary, generous start-up funds, and laboratory space will be available. A letter of application, curriculum vitae, and four letters of reference should be sent to: **Henry Lynch, M.D., Faculty Search Committee Chair, Department of Preventive Medicine and Public Health, Creighton University School of Medicine, 2500 California Plaza, Omaha, NE 68178.** *Creighton University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



EMINENT SCHOLAR (GRA ENDOWED CHAIR) INSTITUTE OF MOLECULAR MEDICINE AND GENETICS Medical College of Georgia

Highly qualified individuals with an established record of excellence in biomedical research are sought for a faculty position at the **PROFESSOR** or **ASSOCIATE PROFESSOR** level. The position is a prestigious Eminent Scholar Chair endowed by the Georgia Research Alliance (GRA) and is tenable in the Institute of Molecular Medicine and Genetics (IMMAG). IMMAG currently consists of 35 research faculty organized into four program areas comprising cell signaling, molecular immunology, gene regulation, and developmental biology under the Directorship of **Dr. H. Rasmussen, M.D., Ph.D.** The primary mission of IMMAG is to establish the Medical College of Georgia as a premier research campus and significant investment by MCG and the GRA have been made to this end. IMMAG Investigators occupy a large custom-built research laboratory building and have access to state-of-the-art IMMAG core facilities for genetic manipulation of mice and zebrafish, mouse phenotype analyses, confocal and microscopic imaging, histology, flow cytometric analysis and cell sorting, molecular biology reagent synthesis, and DNA sequencing. Additional research support facilities including animal housing and husbandry are available through other MCG Departments. Opportunities exist for collaborations with clinical Departments at MCG.

The position attracts a substantial salary and benefits package and a generous laboratory start-up package is available for suitably qualified applicants. Applicants should have an established and consistent record of high-quality contributions to a field of biomedical research related to one or more of the following research themes: tumor cell or molecular biology, tumor or transplant immunobiology. Although expertise in these areas is preferred, applicants who have made significant contributions to related research fields will also be considered for this prestigious post.

Reply with curriculum vitae to: **Howard Rasmussen, Chair, Search Committee, Institute of Molecular Medicine and Genetics, Medical College of Georgia, Augusta, GA 30912-2697.** *We invite applications or nominations from women, racial minorities, and the disabled. Equal Employment Opportunity/Affirmative Action Employer.*

MICROBIAL MOLECULAR EVOLUTION YALE UNIVERSITY

The Department of Ecology and Evolutionary Biology at Yale University invites applications for a **TENURED FACULTY POSITION** in the field of microbial molecular evolution. An internal candidate will also be considered for the position. Applications, which should include a curriculum vitae, research and teaching statements, three representative recent publications, and the names, addresses, telephone, and e-mails of four references, may be sent to: **Microbial Molecular Evolution Search, c/o Jan Taschner, Department of Ecology and Evolutionary Biology, Yale University, Box 208106, New Haven, CT 06520-8106 USA.** Applications must be postmarked by September 1, 1998, in order to receive consideration. *Yale University is an Affirmative Action/Equal Opportunity Employer.*

YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry, Yale University, invites applications for a position at the **ASSISTANT PROFESSOR** level to commence fall 1999. We seek creative Teacher-Scholars who show promise for developing outstanding research programs in the broad fields of inorganic, theoretical, and biophysical chemistry. Applicants should send curriculum vitae and a statement of research plans and arrange for the submission of three letters of recommendation. All materials should be received by 15 October 1998. Send applications to: **Professor Donald M. Crothers, Chair, Junior Faculty Search Committee, P.O. Box 208107, Yale University, New Haven, CT 06520-8107.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

TENURE-TRACK POSITION

The College of Oceanic and Atmospheric Sciences (COAS) announces the availability of a tenure-track position in optical oceanography at the **ASSISTANT PROFESSOR** level.

Applicants should have a strong background in the theory of radiative transfer and the interactions between light and the materials contained within the ocean. We are searching for a person with experience in both experimental and theoretical research in optical oceanography. The successful candidate will be one who has a demonstrated knowledge of radiative transfer theory, its forward application and inversion, as well as experience with numerical solutions to the equation of radiative transfer. It is essential that the candidate possess an interdisciplinary understanding of how the distribution of optical properties are affected by physical, biological, geological, and chemical processes, a background in optical measurements, including *in situ* and remotely sensed measurements, and an interest in improving algorithms for interpreting remotely sensed optical measurements.

The appointee will be expected to develop and maintain a vigorous, externally funded research program, to interact with faculty colleagues and graduate students, and to participate in the teaching program of COAS. Essential qualifications include a Ph.D. in oceanography or a closely related field, a record of significant and exciting research, and the demonstrated ability to attract external funding.

Salary will be commensurate with qualifications. Starting date is anticipated to be fall of 1998, but is negotiable.

COAS is one of the leading oceanographic graduate research institutions in the country with more than 200 faculty and staff, and a wide variety of analytical and oceanographic facilities, including excellent computing facilities, a variety of modern analytical laboratories, and two research vessels. Oregon State University (OSU) is located in an area known for its beauty and quality of life. For more information about the college, OSU, Corvallis, and the environment, please consult our website: <http://www.orst.edu>.

Applications should consist of a letter of interest, a current curriculum vitae that includes a description of current research interests, funding history, a list of publications, and the names and addresses of at least five references. Send application to: **G. Brent Dalrymple, Dean, College of Oceanic and Atmospheric Sciences, 104 Ocean Administrative Building, Oregon State University, Corvallis, OR 97331-5503** by 15 August 1998. Inquiries about the position may be directed to: **Dr. Dalrymple, Telephone: 541-737-5195; e-mail: gbd@oce.orst.edu; FAX: 541-737-2064.** *Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.*

UNIVERSITY OF CALIFORNIA-SAN DIEGO SCHOOL OF MEDICINE DEPARTMENT OF NEUROSCIENCES

The Department of Neurosciences is seeking applications and nominations for a tenure-track or tenured position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. The candidate must be an accomplished scientist and a recognized leader in neurogenetics, systems neurophysiology, developmental neurobiology, neuroimmunology, or neuroimaging and have proven ability as a scholar and a teacher. The candidate's experience will dictate the level of appointment.

The candidate should enjoy interactions with colleagues both in the Department of Neurosciences and throughout the La Jolla community.

Applications should be submitted prior to September 30, 1998. Salary will be commensurate with rank and experience and will be based on University of California pay scales. Curriculum vitae, bibliography, and three letters of reference should be sent to:

**Harvey Karten, M.D.
Chair, Neurosciences Search Committee
c/o Peggy Chambers
Department of Neurosciences
University of California-San Diego
School of Medicine
9500 Gilman Drive
La Jolla, CA 92093-0624**

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

Postdoctoral Fellowships

POSTDOCTORAL FELLOWSHIPS are available through the National Cancer Institute's Division of Basic Sciences Intramural Research Award (IRA) program. Laboratories that have won competitive IRA fellowship positions are seeking outstanding scientists to pursue the following research projects:

- **Androgen receptor regulation and function during prostate cancer progression in transgenic mice.** Dr. Jeffrey Green, Laboratory of Cell Regulation and Carcinogenesis. Candidates should have a strong background in molecular biology and interest in hormone receptor biology.
- **Biochemical and genetic analysis of the function of RNA polymerase and its associated proteins in *E. coli*.** Dr. Ding J. Jin, Laboratory of Molecular Biology. Candidates should have a strong background in biochemistry, molecular biology and/or genetics with interests in nucleosome remodeling and DNA repair.
- **Development of adenovirus-SIV recombinants and assessment of their immunogenicity and protective efficacy in a macaque model for AIDS vaccine development.** Dr. Marjorie Robert-Guroff, Basic Research Laboratory. Candidates should have a strong background in molecular biology and interest in viral immunology and vaccine development.

• **Analysis of changes in cellular gene expression during keratinocyte differentiation and malignant progression in papillomavirus lesions of the cervix using laser capture microdissection and gene microarrays.** Dr. Carl Baker, Basic Research Laboratory. Candidates should have a strong background in molecular biology and interest in molecular virology, cancer biology and gene expression.

• **Generation and analysis of mice with conditional lymphotoxin deficiency, including identification of differentially-expressed genes during lymphoid tissue development.** Dr. Sergei Nedospasov, Laboratory of Molecular Immunoregulation. Candidates should have a strong background in molecular biology and molecular immunology.

• **Generation and analysis of an mRNA expression profile database for use in anti-cancer drug discovery.** Dr. John Weinstein, Laboratory of Molecular Pathology. Candidates should have either a strong background in molecular biology, be computer literate and have an interest in bioinformatics or else have a strong background in statistics, artificial intelligence, and/or computer science.

Please indicate the Fellowship of interest and submit CV and names of three references to Dr. Janelle Cortner, National Cancer Institute/ Division of Basic Sciences, Building 31 Suite 3A11, 31 Center Drive MSC 2440, Bethesda, MD 20892-2440. E-mail: cortnerj@DCBDC31.nci.nih.gov. To learn more about the intramural NCI, see our home page at <http://www.nci.nih.gov/intra/intra.htm>.

CHAIR DEPARTMENT OF BIOCHEMISTRY Wake Forest University School of Medicine

Wake Forest University School of Medicine is seeking applications for the position of Professor and Chair of the Department of Biochemistry. The Department currently has 21 primary faculty members and strong research programs in protein structure and function, metabolism, and molecular biology. The Department has excellent medical and graduate school teaching programs. The successful candidate in addition to having a nationally recognized research program, will have exceptional administrative and organizational skills to direct the Department's continued development and pursuit of academic excellence. *Wake Forest University School of Medicine is an Affirmative Action/Equal Opportunity Employer and especially encourages applications from women and minority candidates.*

Applications including a current curriculum vitae or nominations should be sent to:

Elizabeth Sherertz, M.D.
Associate Dean for Faculty Services
Wake Forest University School of Medicine
Medical Center Boulevard
Winston-Salem, NC 27157

HEALTH SCIENTIST ADMINISTRATOR

GS-601-12/13/14

The Minority Biomedical Research Support Program (MBRS), National Institute of General Medical Sciences (NIGMS), National Institutes of Health is seeking a Health Scientist Administrator to serve as a staff specialist responsible for managing, advising, directing, and evaluating program activities for a portfolio of MBRS grant applications. In addition, the incumbent provides scientific expertise in specialized areas of biology and advises grantees and professional staff members regarding the research aspects of grants within these areas of expertise and serves as a source of technical knowledge.

Applicants interested in applying must have a knowledge of biology or chemistry with specific expertise in at least one of these areas: biochemistry, microbiology, organic chemistry, physiology, genetics, psychology or related areas, and of the experts in these areas of expertise; ability to make critical judgments about the management and evaluation for scientific research; ability to write about complex scientific topics for a varied audience; and knowledge of efforts/programs that are in higher education, business, professional organizations, or government, targeted at underrepresented minorities in the biomedical sciences.

For application package, qualification requirements and additional position information contact: **NIGMS Personnel Office, 45 Center Drive MSC 6200, Bethesda, MD 20892-6200, (301) 594-2749. TDD (301) 402-6327. To receive by FAX, call (301) 594-2953 or 1-800-728-JOBS and enter FAX ID: 3650**

The position is in the Federal Civil Service with a salary range of \$47,066 - \$85,978.

Closing date July 20, 1998. U.S. Citizenship is required.

NIH is an Equal Opportunity Employer

POSITIONS OPEN

MOLECULAR MECHANISMS OF CELL GROWTH CONTROL AND ONCOGENESIS

The Department of Pathology and Program in Molecular Oncology and Immunology at New York University (NYU) School of Medicine announces two tenure-track faculty positions at the **ASSISTANT PROFESSOR** and **ASSOCIATE PROFESSOR** level. We seek to recruit individuals taking molecular and cell biologic approaches to problems of mammalian cell growth and oncogenesis. Individuals with programs emphasizing mechanisms of signal transduction, cell cycle control, and molecular pathogenesis of disease, as well as those applying genetic and genomic approaches to these problems, are particularly encouraged to apply. Successful candidates will join a Department consisting of Investigators with wide-ranging interests, including signal transduction, cell cycle regulation, function of oncoproteins and tumor suppressor genes, DNA repair, gene therapy of cancer, and hematopoiesis. An attractive start-up package with laboratory space within the Department of Pathology will be available, along with appointment to the Graduate Faculty of the Sackler Institute and the Kaplan Comprehensive Cancer Center. NYU provides a vibrant scientific and intellectual environment in the heart of New York City with a long tradition in basic biomedical research and graduate and postgraduate training.

Applicants should send a curriculum vitae and description of research interests and past accomplishments, along with three letters of recommendation to:

Molecular Oncology Search
c/o D. Levy
Department of Pathology
New York University School of Medicine
550 First Avenue
New York, NY 10016

NYU is an Equal Opportunity Employer and encourages applications from members of underrepresented minority groups.

MEDICAL HISTOLOGY FACULTY POSITION

Medical histology. The Department of Biomedical Sciences, Ohio University College of Osteopathic Medicine, invites applications for a full-time tenure-track **ASSISTANT PROFESSOR** position. Primary responsibilities are to teach medical microscopic anatomy and to maintain a viable, independent research program. A Ph.D. or equivalent and postdoctoral research training are required.

Ohio University has 19,000 students, including 2,000 graduate and 400 medical students. The Biomedical Sciences faculty is integrated into the University and directs graduate students (M.S. and Ph.D.) in the Department of Biological Sciences.

Starting date is September of 1998 or January of 1999. The eleven-month salary will be commensurate with experience, and is accompanied by an excellent benefits package. Review of applications will begin on July 1, 1998, but applications will be accepted 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: **Cheri McFee, Medical Histology Search Committee, Ohio University College of Osteopathic Medicine, 304 Grosvenor Hall, Athens, OH 45701-2979.**

Ohio University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN PHARMACOLOGY/TOXICOLOGY

A tenure-track position at the level of **ASSISTANT, ASSOCIATE, or PROFESSOR** is available immediately in the Department of Pharmacology and Toxicology at the University of Mississippi Medical Center in Jackson. Applicants should have a Ph.D. or equivalent advanced degree and should have expertise in cellular and molecular approaches to toxicology or neoplasticity/mutagenicity. The successful applicant will be expected to develop an independent, extramurally funded research program and participate in the teaching activities of the department. Interested persons should send curriculum vitae and a brief description of research interests and arrange for three letters of reference to be sent to: **Jerry M. Farley, Ph.D., Search Committee Chair, Department of Pharmacology and Toxicology, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505.** The deadline for receipt of applications is September 1, 1998. *Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.*

POSITIONS OPEN

The Division of Basic Sciences (DBS), National Cancer Institute (NCI) is recruiting for a **TENURE/TENURE-TRACK POSITION** for a Ph.D., M.D., or M.D.-Ph.D. scientist to develop an independent research program in the area of developmental biology. Applicant should have extensive experience in gene targeting technology to establish a knockout mouse facility on the NIH Bethesda campus. Specific experience should include preparation of recombinant DNA vectors, manipulating embryonic stem cells, manipulating mouse embryos, and performing blastocyte injections. Candidate will be responsible for interaction with other scientists to provide expertise in designing DNA vectors to generate a variety of knockout mouse models and subsequent mouse phenotypic analyses. Candidate will supervise technical personnel responsible for function of the facility. Candidates should have a substantial number of quality, peer-reviewed published reports, and invited presentations at national and international conferences. Applications must include curriculum vitae and bibliography, letter of interest stating research goals, and three letters of reference. The completed application should be received by July 31, 1998, to: **Ms. Kathleen Siler, Building 31, Room 3A11, 31 Center Drive, MSC 2440, Bethesda, MD 20892-2440. FAX: 301-402-0612.** Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.

ASSISTANT PROFESSOR of plant pathology. Mycotoxicology, Penn State. Applications are invited for a tenure-track position in the Plant Pathology Department with 70 percent research and 30 percent teaching responsibility. Duties include research that significantly contributes to the understanding of pathogenic and mycotoxin-producing fungi as they impact plant, animal, and human health, and food safety. Research will focus on (1) the fungal ecophysiology of *Fusarium*, *Alternaria*, *Aspergillus*, *Penicillium*, or *Stachybotrys*, and (2) understanding the biochemical pathways involved with mycotoxin production, and the factors influencing these pathways, including fungal-plant interactions. Will develop collaborations through the Fusarium Research Center and as appropriate with colleagues engaged in toxicology research in animal and human health. One mycotoxicology course and a team-taught molecular mechanisms of toxicity course will be taught. Participation in graduate education through advising graduate student research and serving on student research committees is expected. Ph.D. in mycology, plant pathology, biological science, or related discipline, with strong background in chemistry, biochemistry, or toxicology, required. Submit, by August 31, 1998, a statement of research and teaching goals and interests, curriculum vitae, transcripts, and have at least three letters of reference sent to: **Barbara J. Christ, Box FM-104, 211 Buckhout Laboratory, University Park, PA 16802-4507.** *Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK ASSISTANT PROFESSOR IN THE DEPARTMENT OF BIOMEDICAL SCIENCES

The Department of BioMedical Sciences consists of Divisions of Neuroscience, Pharmacology, and Physiology. Applications currently accepted for July 1998 start or earliest availability of best candidate. Faculty participate in teaching an interdisciplinary integrated medical curriculum. A Ph.D. with postdoctoral experience required. Successful candidates will be expected to establish an independent and extramurally funded research program and foster collaborative interactions with other faculty. Areas of research currently represented within the department include cardiovascular regulation, nerve injury, and pain mechanisms and management; preference given to candidates with an interest in visceral innervation. Candidates will participate in teaching medical and graduate students. Preference given to individuals with demonstrated experience in teaching cellular and systems physiology and neurosciences. Send curriculum vitae with e-mail address, statement of research interest, and the names and addresses of three references to: **Richard M. Kriebel, Ph.D., Professor and Chair, Department of BioMedical Sciences, Divisions of Neuroscience, Pharmacology and Physiology, Philadelphia College of Osteopathic Medicine, 4170 City Avenue, Philadelphia, PA 19131.** *Equal Opportunity Employer.*

POSITIONS OPEN

NEUROGENETICIST DEPARTMENT OF NEUROLOGY COLLEGE OF PHYSICIANS AND SURGEONS Columbia University

A faculty position at the **FULL PROFESSOR** level is available in the Department of Neurology at Columbia University in New York City. Candidates must have an M.D. and/or Ph.D. degree, evidence of first-rank scientific productivity, and a successful record of extramurally funded research. Research that applies modern techniques of molecular biology to the study of neurological and neurodegenerative disorders is of particular interest.

The successful candidate will be expected to expand existing neurogenetics programs within the Department, and to coordinate research with allied programs, such as the Gertrude H. Sergievsky Center and Taub Alzheimer's Disease Research Center, the Department of Genetics and Development, and the Columbia Genome Center. Salary, space, and start-up funds are highly competitive.

Applicants should send a curriculum vitae and a statement of research interests to: **Dr. Eric A. Schon, Chair, Neurogenetics Search Committee, Department of Neurology, Room 4-431, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032.** *Columbia University is an Equal Opportunity Employer.*

TENURE-TRACK POSITION AT THE LAUTENBERG CENTER FOR GENERAL AND TUMOR IMMUNOLOGY The Hebrew University of Jerusalem The Hebrew University-Hadassah Medical School Jerusalem, Israel

The Faculty of Medicine calls for applications for a tenure-track position at the Lautenberg Center for General and Tumor Immunology to be available for the academic year 1999-2000. Ph.D. and/or M.D. degree and postdoctoral training are required. Excellence in research and expertise in modern aspects of cellular and molecular immunology, molecular cancer biology, or related fields will be of prime importance for decisions of the search committee. Candidates are expected to develop independent research and participate in teaching undergraduate and graduate students in the following fields: cell biology, immunology, and general microbiology.

Applicants should submit a curriculum vitae, list of publications, three to five selected reprints, statement of research activities and research plans, and three letters of recommendation to: **The Dean's Office, P.O. Box 12272, Jerusalem 91120 Israel** no later than October 17, 1998.

ASSISTANT PROFESSOR. Insect ecology. 12-month tenure-track; 80 percent research, 20 percent teaching. Conduct research on basic mechanisms using insects of economic importance in Alabama as model systems and provide expertise for IPM programs. Preferred qualifications include demonstrated skills in quantitative, biochemical, and/or molecular techniques in the study of plant-insect interactions, epidemiology of insect-transmitted diseases, and/or field ecology. Develop and teach a course emphasizing principles of insect ecology and another course in the candidate's area of specialization. Ph.D. in entomology or related biological science is required and advanced coursework in insect ecology and statistics is highly desirable. Candidates should have a proven record of research excellence. Submit official transcripts of undergraduate/graduate records, curriculum vitae, statement of research and teaching interests, and the names, addresses (e-mail and surface mail), and telephone numbers of three references to: **Mr. Ron Weeks, Auburn University Headland Substation, P.O. Box 217, Headland, AL 36345. Telephone: 334-693-2010.** Review of applications will begin July 10, 1998 (postmarked), and continue until a suitable applicant is identified and recommended for appointment.

SENIOR RESEARCH SPECIALIST/RESEARCH ASSOCIATES to join group studying RNA protein interactions that control translation and mRNA movement in the testis and nervous system, gene targeting of isozymes and DNA/RNA binding proteins as models for infertility, and structure-based drug design for contraception.

Send résumé and names and addresses of three references to: **Norman B. Hecht, Ph.D., Center for Research on Reproduction and Women's Health, University of Pennsylvania, 752 b Clinical Research Building/6142, 415 Curie Avenue, Philadelphia, PA 19104.**

Scientist

Located in the San Francisco Bay Area, **COR Therapeutics, Inc.** is a publicly-held biopharmaceutical company focused on the discovery & development of novel therapeutics for the treatment of severe cardiovascular disease. Our continued growth has created an excellent opportunity for a skilled Vascular Biologist.

In this position, you will conduct basic research in the area of vascular biology with an emphasis on the cellular mechanisms responsible for restenosis. The candidate will be responsible for the analysis of neointima formation and cellular proliferation that occur in response to vascular injury in models of restenosis. The position requires a PhD, 3+ years of postdoctoral training, and a working knowledge of the intracellular pathways involved in cell migration and proliferation. A background in the area of vascular injury, atherosclerosis or angiogenesis and training in basic histology and immunohistochemistry are a must.

COR Therapeutics, Inc. offers competitive salaries & benefits, attractive equity positions and the opportunity to make significant research contributions. To apply, please send resume & salary history to: **COR Therapeutics, Inc., Human Resources, Job# 98031-SCI, 256 East Grand Avenue, South San Francisco, CA 94080; Fax: (650) 615-9639; Email: hr@corr.com.** COR is an equal opportunity employer.

COR COR THERAPEUTICS, INC.

Assistant Professor Molecular Mechanisms of Birth Defects

Applications are invited for an available position in the research track at the Assistant Professor level to investigate molecular/genetic mechanisms of birth defects. Successful candidates will join a research team active in the investigation of: signal transduction, regulation of gene expression, embryo toxicity, and genetic determinants of abnormal development of the craniofacial region. Opportunities exist to collaborate with existing research programs in the University of Louisville Birth Defects Center. The candidate will be expected to develop an independent research program and successfully compete for external funding in an area related to molecular craniofacial biology.

Applicants should submit: (1) curriculum vitae, (2) a statement of current research activities and future research plans, and (3) names of three references to: Dr. Robert Greene, Laboratory of Molecular Craniofacial Development, Department of Biological & Biophysical Sciences, ULSD, University of Louisville, Louisville, KY 40292. The University of Louisville is an EEO/AA employer. Women and minorities are encouraged to apply.

UofL

MAKING EVERYDAY LIVING A HEALTHIER EXPERIENCE



**... at Glaxo
Wellcome,
R&D is the key.**

Glaxo Wellcome Inc., one of the world's largest pharmaceutical companies, is a company of people working together for a healthier world. Our breakthrough discoveries are helping people with HIV/AIDS, cancer, heart disease, asthma, migraines, epilepsy and many other diseases. Come share the challenge of leadership as we develop breakthrough medicines for everyday living. We currently have the following opening at our U.S. Corporate Headquarters located in Research Triangle Park, N.C.

RESEARCH INVESTIGATOR

Bring your knowledge of protein biochemistry and expression to this exciting opening within our **Molecular Sciences Department**. You will prepare and characterize the protein reagents that are used throughout our drug discovery efforts. A challenging function will be to prepare targets that are authentic with respect to their natural activities, even if foreign biological expression systems may be used.

This position requires a BS, MS or Ph.D. degree with 2-6 years relevant experience. An appreciation of the physical characteristics of "targets" is a prerequisite, as is knowledge of protein purification, protein chemical modification, protein biophysical and functional characterizations. Candidates must have molecular and cellular biology training and experience with expression systems and vectors. They must possess initiative, communication, teamwork and leadership skills.

Our location is just another great reason for joining Glaxo Wellcome. Research Triangle Park, NC is the world's largest planned research center and is within easy reach of three major universities. The area offers outstanding cultural activities and a quality of life enhanced by beaches, a short drive to the east, and mountains to the west. You'll also benefit from a competitive salary and a comprehensive benefits package. For consideration, send your resume to: **Employment Services/R&D, Job #ASC5381-1, Glaxo Wellcome Inc., 5 Moore Drive, Bldg. #5, Room 2520, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please). To review other openings, call our Job Line or visit our Website.

GlaxoWellcome

Breakthrough Medicines
For Everyday Living™

An Equal Opportunity Employer M/F/D/V

Website:
www.glaxowellcome.com

Job Line:
(919) 483-2565

POSITIONS OPEN

PHYSIOLOGIST ASSISTANT PROFESSOR-PH.D.

Tenure-track position at Eastern New Mexico University. A diversified Department of Biology seeks person to teach general biology of animals, human physiology, comparative physiology, mammalian physiology, and biological literature. Send to: **Physiology Search**—see below.

CELL/MOLECULAR BIOLOGIST-PH.D. ASSISTANT PROFESSOR

Tenure-track position. Seeks person to teach molecular/cell biology courses plus general biology of animals. Send to: **Cell/Molecular Search**—see below.

For the physiology and cell/molecular positions, advising B.S. and M.S. students, an active research program, and university service is expected.

ANATOMIST-PH.D. ONE-YEAR TEMPORARY POSITION

Temporary position. Teaching duties: fall semester, human anatomy and embryology; spring semester, human anatomy and comparative anatomy. Send to: **Anatomy Search**—see below.

For above positions, send curriculum vitae, transcripts, statements of teaching philosophy and research interests, and three letters of recommendation to: **Personnel Department, Station #21, Eastern New Mexico University, Portales, NM 88130**. Applications accepted until position is filled; screening begins June 30, 1998. For more information, **Telephone: 505-562-2478**. *Affirmative Action/Equal Opportunity/Title IX Employer.*

FACULTY POSITIONS AIDS AND OTHER CHRONIC VIRAL INFECTIONS RESEARCH

The Institute of Human Virology of the Medical Biotechnology Center, University of Maryland invites applications for non-tenure-track positions at the level of **RESEARCH ASSISTANT PROFESSOR**. M.D., or Ph.D., or equivalent doctoral degree, experience in clinical and/or basic research in chronic viral infections are required. Applicants should be capable of establishing a strong, independent, and extramurally funded research program in the areas of human virology. Applicants should possess a record of scientific work in the area of human virology, infectious diseases, and cancer, or molecular and cell biology. Required skills include molecular and cell biology techniques as applied to this specific field. Salary is commensurate with experience. Review of applications will begin July 20, 1998, and continue until suitable candidates are selected. Send a letter of application, a statement of research interests, and an updated curriculum vitae with names and addresses of three references to: **Search Committee, Institute of Human Virology, 725 West Lombard Street, Baltimore, MD 21201**. *Affirmative Action/Equal Employment Opportunity Employer.*

TENURE-TRACK ASSISTANT PROFESSOR POSITION IN STRUCTURAL BIOLOGY

The Department of Biochemistry and the University of Kentucky Center for Structural Biology are soliciting applications for an individual utilizing physical (particularly crystallography or protein engineering), chemical, biochemical, and/or recombinant DNA approaches to study molecular mechanisms in biological systems. The successful candidate will join an existing group of faculty with expertise in high-field NMR and X-ray crystallography as well as theoretical approaches to protein folding and structure. Applicants should send a letter of intent, curriculum vitae, a brief description of their research plan, and three letters of recommendation. All materials should be addressed to: **Structural Biology Search Committee, Department of Biochemistry, University of Kentucky, 800 Rose Street, Lexington, KY 40536-0298**. *The University of Kentucky is an Equal Opportunity Employer and encourages applications from qualified women and minorities.*

A **TENURE-TRACK FACULTY POSITION** is available to join a multidisciplinary research group in hearing. Criteria for selection include a proven track record of research with ability to secure national funding and relationship of research programs to existing faculty interests. Send curriculum vitae and supporting material to: **Charles Berlin, Ph.D., Department of Otolaryngology and Kresge Hearing Laboratory, 2020 Gravier Street, New Orleans, LA 70112**. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The world's most successful independent technology management company seeks a

VENTURE DEVELOPMENT ANALYST

Applicants must have both a degree in the life sciences and a Master's degree in business, finance, or economics. We welcome applicants with varying levels of work experience, including students nearing graduation. The position requires entrepreneurial spirit, strong skills in business analysis, excellence in written and interpersonal communication, and knowledge of technology development strategies, policies, and issues. The Analyst will conduct appraisal and business analysis of early-stage technologies in the life sciences that show significant potential value; create strategic development plans to add value to these technologies through active management and investment; work closely with associates in our Life Sciences Group; identify appropriate partners in specific technology development activities; travel frequently from the corporate office in Tucson; be aware of, and willing to learn about, patent law and issues.

Research Corporation Technologies (**website: www.rcitech.com**) offers a competitive salary, generous benefits, and short- and long-term incentive compensation plans. Mail your résumé and cover letter to: **Stephen Reidy, 101 North Wilmot Road, Suite 600, Tucson, AZ 85711-3365**.

FACULTY POSITION IN FOOD BIOCHEMISTRY EDUCATION University of Delaware

The Department of Animal and Food Sciences invites applications for a 12-month tenure-track faculty position at the **ASSISTANT PROFESSOR** level. We are searching for a **BIOCHEMIST/BIOTECHNOLOGIST** with research interests in the general areas of food biochemistry, food science, or food biotechnology. Applicants should hold a Ph.D. in an appropriate discipline and have postdoctoral experience. The successful candidate is expected to develop/maintain a high quality, extramurally funded, and contemporary research program. Teaching responsibilities (50 percent) are directed at both undergraduate and graduate students. More information about the University of Delaware and the position can be obtained through the following **website: http://bluehen.ags.udel.edu**.

Applicants should arrange to have a curriculum vitae, a statement of research interests, and four letters of recommendation sent by July 30, 1998, to: **Dallas G. Hoover, Chair, Food Biochemist Search Committee, Department of Animal and Food Sciences, University of Delaware, Newark, DE 19717-1303**. **FAX: 302-831-2822; e-mail: dgh@udel.edu**.

The University of Delaware is an Equal Opportunity Employer and encourages applications from minority group members and women.

The Denver Museum of Natural History seeks applications for the position of **DEPARTMENT HEAD** and **CURATOR** in the Department of Zoology. The Department has collections in ornithology, mammalogy, and entomology and one Curator in each specialization. Applicants must demonstrate a strong record of collections-based research in one of these areas of specialization. Scientists whose research program also includes a field component are particularly encouraged to apply. Expertise on the ecosystems of the Great Plains and Rocky Mountains highly desirable. Experience in project management, grant writing, and work in informal science education must be demonstrated. The successful candidate should desire to interact with the public and the media about their area of specialization. Ph.D. in zoology or a related field is required. The primary responsibilities of the successful candidate are participation in leadership of the Collections and Research Division, management of the Zoology Department, and research and educational programming in area of specialization. Salary range competitive and commensurate with experience. Please send curriculum vitae, three letters of reference, and examples of both popular and scientific writing to: **Chief Curator, Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, CO 80205**. Deadline for applications is July 31, 1998. *The Denver Museum of Natural History is an Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTOR OF INTERNATIONAL ZEBRAFISH STOCK CENTER University of Oregon

The University of Oregon seeks a Director for an International Zebrafish Stock Center, which will be built on the University campus. The Stock Center will maintain and make available to the research community wild-type and mutant zebrafish stocks, frozen sperm, and reagents. It will organize genetic markers, maintain the genetic map, and distribute information. The Director will work with an advisory committee of zebrafish researchers and local planners to design and construct the new facility, purchase equipment, set up and maintain a large-scale aquarium system, hire and train facility staff, and manage the activities of the Stock Center. With help from the advisory committee, the Director will be responsible for deciding which mutations to keep in the Stock Center as live fish and which as frozen sperm samples. The Director will need to interact efficiently with the zebrafish research community to solicit submission of mutant strains, reagents, and genetic map markers. Candidates should have an advanced degree and/or training in biology, experience with embryology and genetics (preferably zebrafish), and strong organizational and management skills. Salary commensurate with experience. For priority consideration application file must be complete by July 1, 1998. For more information about the Stock Center see **website: http://zfsh.uoregon.edu/zf_info/dir.html**. To apply contact:

**Ellen McCumsey
Institute of Neuroscience
University of Oregon
Eugene, OR 97403-1254
Telephone: 541-346-3191
FAX: 541-346-4548**

E-mail: ellenm@uoneuro.uoregon.edu

Affirmative Action/Equal Opportunity/ADA Institution committed to cultural diversity.

PHYSICAL/BIOPHYSICAL CHEMIST. The Department of Chemistry of the University of Puerto Rico-Rio Piedras invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning as early as August 1998. The successful candidate will be expected to develop an active and competitive research program in ultrafast (fs and/or ps) spectroscopy applied to biomolecular processes and biomedical problems. Possible areas could include electron transfer, protein dynamics, and fast processes in photobiology. A generous start-up package, funded by the National Institutes of Health through the Research Centers at Minority Institutions Program, will be made available to the successful candidate. Applicants should have a demonstrated record of scholarship, research experience, and a strong interest in fast processes in biochemical systems. In addition, the successful candidate should have a strong interest in developing and teaching classes at both the undergraduate and graduate levels. A Ph.D. in chemistry, biochemistry, biophysics, or related field is required. Please submit a complete curriculum vitae and publication record, a brief summary (three to five pages) of research plans, and three letters of reference by July 17, 1998, to: **Reginald Morales, Chair, Department of Chemistry, University of Puerto Rico, P.O. Box 23346, University Station, San Juan, PR 00931**.

RESEARCH ASSISTANT PROFESSOR PLASTIC SURGERY

Southern Illinois University (SIU) School of Medicine in Springfield, Illinois has an opening for a full-time Research Assistant Professor in the Division of Plastic Surgery. Requirements: possess a Ph.D. with two to five years of postdoctoral research experience, expertise in molecular biology, physiology, and computer software. Duties include obtaining long-term grant support, providing research instruction and supervision to students and residents. Departmental support for the first two years. Curriculum vitae and letter of inquiry should be sent to:

**Michael W. Neumeister, M.D., Assistant Professor
Southern Illinois University School of Medicine
Institute for Plastic and Reconstructive Surgery
P.O. Box 19230
Springfield, IL 62794-1511**

Closing date for this position is July 31, 1998, or until filled.

SIU School of Medicine is an Equal Opportunity/Affirmative Action Employer.

CHIEF, LABORATORY OF IMMUNOTHERAPY

National Institute on Aging

National Institutes of Health
Department of Health & Human Services

The National Institute on Aging (NIA) is recruiting a scientific leader for its research efforts in immunotherapy. The Chief of the Laboratory of Immunotherapy is responsible for a sizable intramural research laboratory with at least three other independent tenured and tenure track senior investigators. This is a Civil Service Position. Starting salary will be commensurate with qualifications and experience. Candidates may be eligible for Physician's Comparability Allowance up to \$20,000 per year. Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service as well as the Senior Biomedical Research Service.

The National Institute on Aging is interested in expanding its translational research effort in the study of the immune system and host defenses and how these systems are compromised in aging and in aging-associated diseases. The successful applicant will have an M.D. degree with a record of basic research and clinical research productivity. Expertise in cellular immunology, cell biology, molecular biology, and biochemistry would be beneficial. The successful applicant will be expected to establish an independent research program on application of an understanding of immune system function (including cytokine action, signal transduction, gene expression, cell physiology) to the treatment of cancer, infections, and the alterations in immune function that occur with aging. Mechanistic studies should lead to an understanding of the basis for any defects and suggest potential therapeutic interventions that might reverse the defects.

Further information may be obtained by contacting Ms. Holly Watkins at 301-496-5347. A current curriculum vitae, bibliography, and three letters of reference should be submitted to:

NATIONAL INSTITUTE ON AGING
PERSONNEL OFFICE
31 CENTER DRIVE MSC 2292
BETHESDA, MD 20892-2292

Applications must be postmarked by July 15.

NIH is an Equal Opportunity Employer



innovation, discovery, opportunity.
You'll find them at Roche.

*In the world of
healthcare, few
companies are in a
position to do so
much for so many
as Hoffmann-
La Roche. Our
mission is to
identify and satisfy
the healthcare
needs of the world.
In our never-
ending quest for
innovative
products, we
exercise
imagination,
ingenuity and an
uncompromising
pursuit of
discovery.*

At Hoffmann-La Roche, our dedication to the future is evident in our commitment to the research, development and manufacture of pharmaceuticals that ease the lives of people worldwide. We currently have a position available for a dedicated, experienced scientific professional to join us in our U.S. headquarters in Nutley, New Jersey.

Pharmaceutical Toxicologist

As an active member of local Drug Discovery and International Development Teams, you will contribute to the identification of potential drug candidates and their subsequent development through NDA submission to post-approval support. You will use your toxicological knowledge, skills and expertise to strategically manage the pre-clinical safety programs for drugs in development including the design and interpretation of toxicity studies and the preparation of contributions to internal and regulatory documents.

To qualify, you must have a Ph.D. or a veterinary degree and a minimum of 5 years pharmaceutical and drug development experience. Strong oral/written communication, interpersonal and team skills are required, supported by the ability to effectively plan and manage multiple scientific projects and to make sound scientific decisions. PC/computer knowledge is essential.

At Roche, we not only offer employees competitive salaries and comprehensive benefits, but we also offer a unique campus-like facility, state-of-the-art fitness center, and on-site childcare. For consideration, forward your resume to: **Hoffmann-La Roche, R&D Human Resources, Dept. 98-0301, Bldg. 76/508, 340 Kingsland Street, Nutley, NJ 07110.** Principals only. We appreciate your interest in Hoffmann-La Roche but can only respond to qualified candidates. Hoffmann-La Roche is an equal opportunity employer fully committed to diversity in the workplace.



POSITIONS OPEN

LECTURER POSITION COLLEGE OF VETERINARY MEDICINE CORNELL UNIVERSITY

The Department of Microbiology and Immunology at the College of Veterinary Medicine, Cornell University, is seeking a Lecturer to teach courses for a period of three years in microbiology and infectious diseases. Candidates should have a D.V.M. or Ph.D. in microbiology with demonstrated expertise in bacterial pathogenesis and a commitment to teaching.

The successful candidate will contribute to the teaching of a core course (Host, Agent, and Defense) in the second year of the veterinary curriculum. This will involve serving as a Lecturer in bacteriology and bacterial diseases, a resource person in microbiology laboratories, and a facilitator of small group learning sessions. Additional duties will include an elective course in veterinary infectious diseases and participation in curriculum design at the department and College levels. In alternate years the successful candidate will offer an undergraduate/graduate-level course in pathogenic bacteriology and mycology. Applicants should send a letter describing experience and career goals, a curriculum vitae, and the names and addresses of three references to: **Dr. Roger Avery, Chairman, Department of Microbiology and Immunology, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401. Telephone: 607-253-3402; e-mail: rja5@cornell.edu.** Application deadline July 17, 1998. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

MICROBIAL GENETICIST. Luther College, Decorah, Iowa, invites applications for a tenure-track appointment at the rank of **ASSISTANT PROFESSOR** beginning January 1999. Able to teach genetics and microbiology, as well as participate in a team-taught principles of biology course. Candidate will be expected to direct undergraduate students in research and to seek external funding for research. Must be committed to undergraduate teaching and research in the context of a liberal arts college; visit our **website: www.luther.edu/~bioddept** to learn about our department. Ph.D. required and postdoctoral experience desirable. Review of applications to be completed by September 1, 1998. Send letter of application, curriculum vitae, three letters of recommendation, and transcripts of undergraduate and graduate work to: **Dr. Jim Eckblad, Head, Department of Biology, Luther College, Decorah, IA 52101. E-mail: eckblad@luther.edu.** An Equal Employment Opportunity Employer.

MOLECULAR BIOLOGISTS

Strong background in virology and/or bacteriology to study infectious complications in marine aquaculture. Experience with molecular cloning, cell culture, PCR, sequencing required, previous work with nonoccluded baculovirus a plus. The initial appointment is for two years. Research laboratories are located in San Diego. Salary \$26,000 to \$35,000.

Send curriculum vitae and the names of three references to: **The Super Shrimp Group, 1545 Tidelands Avenue, Suite J, National City, CA 91950. Telephone: 619-477-5394; FAX: 619-477-5396; e-mail: klimpel@supershrimp.com.**

STAFF ASSOCIATES. Three positions in the Immunogenetics Division are available for candidates with interest/experience in cellular and molecular immunology. Duties and requirements for each position are as follows: (1) flow cytometry analysis of lymphocyte differentiation antigens; (2) molecular immunology of HLA and lymphokines; (3) propagation and cloning of antigen-specific T cell lines. M.D., Ph.D., or M.S. with four years of experience. Send curriculum vitae and names of three references to: **Dr. Nicole Suciu-Foca, College of Physicians and Surgeons of Columbia University, Department of Pathology, P&S 14-401, 630 West 168th Street, New York, NY 10032.** *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE and ASSISTANTS for Ceres Inc., applying high-throughput gene technology to plants, at our state-of-the-art research facility on the Malibu coast. For both positions: B.S. and/or M.S. degree in biological sciences. For Associate positions, experience with differential gene expression or PCR is useful. Résumé to: **HRM (Ref:154), Ceres Inc., 3007 Malibu Canyon Road, Malibu, CA 90265.**

POSITIONS OPEN

DIRECTOR OF RESEARCH METAPROBE LLC

Requires a Ph.D. in chemistry and five years of industrial experience, with strong emphasis on synthesis and coordination chemistry and demonstrated experience in development of contrast agents for diagnostic radiology. This start-up company is located in Pasadena, California.

Work with a multidisciplinary team to develop innovative advances of MetaProbe's physiological active contrast-enhancement media.

The Director will participate in technical market research and product development, and have responsibility for executing strategy for new technology development. This position requires excellent program management skills.

Mail résumé and cover letter to: **Venture Development Director, 101 North Wilnot, Suite 600, Tucson, AZ 85711-3365.** *Equal Opportunity Employer.*

CARDIAC ELECTROPHYSIOLOGY PHYSICIAN

The West Los Angeles VA Medical Center Department of Medicine seeks a part-time Cardiac Electrophysiology Clinician. The applicant must be skilled in the performance, interpretation, and measurement of high-quality MAP recordings in humans, computer processing of electrophysiologic signals including the use of MATLAB and EPLAB software, performance of hemodynamic electrophysiologic research, including the measurement of intracardiac pressures during electrophysiologic perturbations, cardiac mapping and ablation procedures of arrhythmic foci, evaluation and reprogramming of atrial and ventricular ICDs, performance of TEEs, and diagnostic cardiac catheterization, including complex hemodynamic measurements. Position requires ABIM Board certification in both internal medicine and cardiology and Board certification or eligibility in Cardiac electrophysiology. Interested candidates send curriculum vitae to: **Sherry Setoda, Human Resources (05R), West Los Angeles VA Medical Center, 11301 Wilshire Boulevard, Los Angeles, CA 90073. Telephone: 310-268-4124.** Position is subject to drug testing. Direct Deposit is required.

The Department of Veterans Affairs is an Equal Opportunity Employer.

CARDIOVASCULAR RESEARCH MCGILL UNIVERSITY

The McGill University Health Centre and McGill University are seeking a highly motivated, innovative scientist with a strong track record in the molecular biology of the cardiovascular system and/or angiogenesis and vascular remodeling. The position is for a tenured Novartis Chair in the Department of Medicine. The successful candidate will be responsible for establishing and maintaining a vigorous extramurally funded research program. *In keeping with Canadian immigration requirements, preference will be given to Canadian citizens and permanent residents of Canada; however, others are encouraged to apply.*

Please submit a curriculum vitae, list of publications, outline of current research interests, and names, addresses, and telephone numbers of three references before September 30, 1998, to: **Dr. David Goltzman, Royal Victoria Hospital, Room A3.09, 687 Pine Avenue West, Montreal, Quebec H3A 1A1 Canada.** *McGill University is committed to Equity in Employment.*

Functional neuroimaging. The Departments of Neurology and Radiology, Harvard Medical School and Beth Israel Deaconess Medical Center, are seeking a **DIRECTOR** for our functional neuroimaging facilities with advanced training and a strong research program in the field. An M.D. degree or equivalent and Board eligibility or certification in neurology or radiology is desirable, but appropriate Ph.D. candidates will also be considered. In addition to pursuing his or her own exciting and state-of-the-art research program, the candidate will serve as the manager of functional neuroimaging facilities and as a resource for other Investigators who wish to use them. Please send curriculum vitae, a brief description of research goals, and the names of three references who may be contacted, to: **Clifford B. Saper, M.D., Ph.D., Professor and Chairman, Department of Neurology, Beth Israel Deaconess Medical Center, 330 Brookline Avenue, Boston, MA 02215.** *BIDMC is an Equal Opportunity/Affirmative Action Employer that specifically encourages applications by women and minority group members.*

POSITIONS OPEN

EXPERIMENTAL NEUROPATHOLOGIST. The Departments of Neurology and Pathology, Harvard Medical School and Beth Israel Deaconess Medical Center, are seeking an Experimental Neuropathologist to pursue a laboratory-based research program and to work part time in the clinical neuropathology service. The candidate must have a M.D. degree or equivalent and Board eligibility or certification in neuropathology in the United States. The candidate must have an active and exciting research program, which should complement the existing strengths of the department in cerebral ischemia and cell death, neurodegenerative disorders, neuro-oncology, neural development, epilepsy, multiple sclerosis, neurogenetics, or neuromuscular disease. Please send curriculum vitae, a brief description of research goals, and the names of three references who may be contacted, to: **Clifford B. Saper, M.D., Ph.D., Professor and Chairman, Department of Neurology, Beth Israel Deaconess Medical Center, 330 Brookline Avenue, Boston, MA 02215.** *BIDMC is an Equal Opportunity/Affirmative Action Employer that specifically encourages applications by women and minority group members.*

ECOLOGIST

The Institute of Pacific Islands Forestry seeks a leader for its team on nonindigenous plant species. Applicants should have significant supervisory and research experience in ecosystem processes, plant population and community ecology, or plant-insect interactions. Location is Hilo, Hawaii. The Institute is part of the USDA Forest Service's Pacific Southwest Research Station. This position is GS-13/14; salary range is \$60,000 to \$90,000 including cost-of-living adjustment. *Candidates must be U.S. citizens.* Application guidelines and instructions are available on the USA Jobs website: **www.usajobs.opm.gov** and from: **Personnel Management, Pacific Southwest Research Station, P.O. Box 245, Berkeley, CA 94701, Attn: PSW-519-98. Telephone: 510-559-6350; FAX: 510-559-6350; e-mail: pm/psw@fs.fed.us.** Questions regarding the position can be directed to: **Dr. Katherine C. Ewel, Telephone: 808-522-8230; FAX: 808-522-8236; e-mail: kewel@gte.net.** All application materials must be received by 31 July 1998. *The U.S. Department of Agriculture is an Equal Opportunity/Affirmative Action Employer.*

SCIENTIST

Lifecodes Corporation is the leading manufacturer and worldwide supplier of DNA products for human identity and transplantation. Lifecodes is employee-owned with subsidiaries in Maryland, Michigan, and Tennessee. Our Stamford, Connecticut facility is seeking qualified candidates for the above position. The individual will contribute to the development of novel testing formats and methodologies for genetic typing. To qualify, you must have a Ph.D. with three to five years of postdoctoral experience in molecular biology/genetics developing procedures for DNA-based testing (industrial experience preferred). Lifecodes offers a competitive salary and comprehensive benefits package. Please forward your curriculum vitae including salary history to: **Lifecodes Corporation, Human Resources Department, 550 West Avenue, Stamford, CT 06902. FAX: 203-328-9599; e-mail: kknobel@lifecodes.com.** For more information, visit our website: **www.lifecodes.com.** *Equal Opportunity Employer/Affirmative Action.*

STAFF RESEARCH ASSOCIATE IV

A full-time position in gene targeting facility. Must have proven ability to perform transgenic or ES cell injections with good success. Career position with salary range: \$36,000 to \$54,900.

Send résumé with three references to: **University of California, Berkeley, Human Resources—Employment Unit, Job# 02-308-30, 2200 University Avenue, Room 7G, Berkeley, CA 94720.**

Position open until filled; review of applicants will begin two weeks after this ad is published.

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

POSTDOCTORAL POSITION available to carry out heterologous expression and enzymatic assay of proteins involved in the biosynthesis of polyketides. Previous experience with protein expression and enzymatic assays is required. A strong background in organic chemistry is preferred. Send curriculum vitae and the names of three references to: **Dr. Ronald Parry, Department of Chemistry MS-60, Rice University, 6100 Main Street, Houston, TX 77005-1892.**

Electrical Engineer, ZP-IV (Salary range: \$79,310–85,978), Vacancy Announcement #NIST-98-2038/JF. The requirements of this R&D position are to design and develop standard reference materials (SRMS) for scanning electron microscopes (SEMS) and direct calibrations using the SEM. The SRMs include the development of an advanced SEM calibration artifact (SRM 2090) and a sharpness artifact (SRM 2091). Duties in calibrations include the training and direction of a technician in the operation and calibration of the SEM, the certification and development of documentation for SRM 2090, writing calibration reports, development of the SEM uncertainty statement, and maintenance of the SEM metrology instrumentation. The incumbent will also perform state-of-the-art research in SEM metrology particularly relating to methods divergence between different submicrometer measurement techniques and will participate on standards committees for the development of SEM standards and calibration procedures. Other duties include strong industrial interaction and collaboration in other length-related programs within the group.

Candidates must have a BSEE or equivalent experience in electrical engineering, preferably in submicrometer semiconductor metrology utilizing automated scanning electron microscope metrology instruments. Experience must include one year of specialized experience equivalent to the GS-12 level.

Candidates must demonstrate possession of the following factors: (a) ability to design and to develop scanning electron microscope calibration samples as demonstrated by patents received, publications written, or physical specimens developed along with measurement results, (b) knowledge of the operation, maintenance, and calibration of scanning electron microscope instrumentation as demonstrated by experience in semiconductor research and production utilizing such instruments and peripheral accessory design and fabrication; (c) ability to devise experimental procedures to quantify components of measurement uncertainty associated with instrument and metrology protocols and the ability to apply statistical methods to establish the magnitude of the uncertainty components; and (d) ability to write scientific publications concerning scanning electron microscope metrology and instrument optimization as demonstrated by first or second authorship on at least three previous publications.

Interested applicants should submit (1) SF-171 or OF-612 or résumés containing the information outlined in OF-510, (2) transcripts or OPM form 1170/17, (3) supplemental qualification statements, and (4) proof, if claiming veteran's preference, by close of business 7/6/98, to J. P. Collington, Office of Human Resources Management, Attn: Vacancy #NIST-98-2038/JF, National Institute of Standards and Technology, U.S. Department of Commerce, Gaithersburg, MD 20899. NIST is an Equal Opportunity/Affirmative Action Employer. U.S. citizenship required.



**WE'RE REDEFINING THE WAY
THE WORLD LOOKS AT LIFE SCIENCES.**

**WE'RE THE NEW
LIFE SCIENCES COMPANY AT MONSANTO.**

And we're even more focused on the future. That's why our entire organization, from agricultural biotechnology to pharmaceuticals to food ingredients, is dedicated to life sciences. Now, we can answer the questions, needs and demands of our ever-changing planet. After all, the world's resources are finite, but our vision for the future is limitless. Currently, we have the following opportunity available for an individual to join our organization:

SCIENTIST (POSTDOCTORAL LEVEL)

Ph.D. scientist trained in arachidonic acid metabolism and biochemistry wanted to dissect mechanistic role of this pathway in immune cell physiology and in vivo models of inflammation. Training in lipid metabolism and methodology, as well as in cellular biology and tissue culture required.

Monsanto offers a competitive salary and excellent benefits package. For immediate consideration for this position, please send your CV, three letters of reference, and a cover letter detailing your experience and scientific interest to Dr. Philip Needleman, Senior Vice President and Chief Scientist, Monsanto Company, 800 North Lindbergh Blvd., Mail Zone: A3SC, St. Louis, MO 63167. EEO/AA Employer M/F/D/V. Please visit our website at www.monsanto.com.

MONSANTO

Food • Health • Hope™



HETEROLOGOUS GENE EXPRESSION TECHNOLOGIES

The Department of Gene Expression Sciences has openings for creative and dynamic scientists with expertise in developing and utilizing recombinant gene expression technologies, with an emphasis on insect cell and baculovirus systems. The Department has worldwide responsibilities for producing molecular targets and therapeutic proteins using bacterial, insect and mammalian cell culture systems and works to define the function of the products produced in a highly integrated manner with scientists throughout the research organization. The selected candidates will apply their expression expertise as members of multidisciplinary teams in numerous therapeutic areas.

Specific opportunities exist for the following positions:

PhD Scientist

Requirements include a PhD and a minimum of 3-5 years post-doctoral experience (preferably industrial) in Molecular Biology or a related field with demonstrated productivity and creativity as evidenced by a strong publication record. An extensive knowledge of laboratory experience with baculovirus and other heterologous gene expression systems is required, along with strong skills in molecular techniques. Experience in anti-viral and anti-bacterial research is desirable. Excellent oral and written communication skills and the ability to effectively interact in multidisciplinary teams are key. (Job Code: H8-0196S)

BS/MS Scientist

Requirements include a BS or MS in Molecular Biology or a related field with a minimum of 2-3 years of experience. Previous experience in heterologous gene expression using the Baculovirus system is required. The successful candidate will have a mastery of mammalian and insect culture techniques, along with strong technical skills in molecular biology and immunoassay techniques. Excellent oral and written communication skills are required, along with the ability to work as part of varied multidisciplinary teams. (Job Code: H8-0197S)

Located in our state-of-the-art research facilities in suburban Philadelphia, PA SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please send your resume, and the names of three references, to: SmithKline Beecham Pharmaceuticals, (Job Code), P.O. Box 40047, Philadelphia, PA 19106. Indicating Job Code is essential. We are an Equal Opportunity Employer, M/F/D/V.

www.sb.com



SmithKline Beecham
Pharmaceuticals

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

The USDA, Agricultural Research Service, Arthropod-borne Animal Diseases Research Laboratory, in Laramie, Wyoming, seeks a **MICROBIOLOGIST/MOLECULAR BIOLOGIST**, GS-11 (\$38,593) to study molecular interactions between arboviruses and their insect vectors. Research objectives are to improve understanding of viral diversity, pathogenesis, and epidemiology. A Ph.D. degree in microbiology/virology or related field is required. Candidates with experience in virology and/or receptor biology preferred. This appointment is not to exceed two years, but may be extended for an additional two years. *U.S. citizenship is not required, however certain restrictions may apply for noncitizens.* For information concerning the position contact: **Dr. W. C. Wilson, Telephone: 307-766-3622; e-mail: wewilson@uwyo.edu.** For application procedures/forms contact: **B. Bobango, Telephone: 307-766-3606; e-mail: bobango@uwyo.edu** or write to: **USDA, ARS, Arthropod-Borne Animal Diseases Research Laboratory, P.O. Box 3965, University Station, Laramie, WY 82071-3965.** Applications must be received at the above address by July 24, 1998. *ARS is an Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP IN BEHAVIORAL NEUROGENETICS

BECKMAN INSTITUTE
University of Illinois at Urbana-Champaign

A Postdoctoral position is available to implement a neurobehavioral test battery for characterization of novel transgenic mice. This is an interdisciplinary project involving six laboratories in cell biology, physiology, psychology, and psychiatry. Rodent (preferably mouse) behavioral experience essential. Send curriculum vitae, three letters of reference, exemplary publication(s) to: **Behavioral Neurogenetics Fellowship, Beckman Institute, University of Illinois, 405 North Mathews Avenue, Urbana, IL 61801. E-mail: neurogen@life.uiuc.edu.** To ensure full consideration, applications must be received by July 15, 1998. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS are available immediately to work on the molecular mechanisms of insulin signal transduction and on the transcription factor-mediated control of cell cycle progression. A strong foundation in biochemistry and molecular biology is required. Please send curriculum vitae, names of three references, and a summary of research experience to: **Robert E. Lewis, Eppley Cancer Institute, University of Nebraska Medical Center, 986805 Nebraska Medical Center, Omaha, NE 68198-6805. FAX: 402-559-4651; e-mail: rlewis@unmc.edu.**

For recent publications and information on the Eppley Institute please see website: <http://www.unmc.edu/Eppley/>. *UNMC is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS are available immediately for an NIH-funded project on membrane fusion in lung surfactant secretion. Ph.D. (biochemistry) with experience in molecular biology, specifically in screening of cDNA library and expression of recombinant proteins, is highly desirable. Salary according to experience. Send curriculum vitae and three reference names to: **Avinash Chander, Ph.D., Thomas Jefferson University, Department of Pediatrics, Division of Neonatology, Suite 700, 1025 Walnut Street, Philadelphia, PA 19107.**

POSTDOCTORAL POSITION available July 1, 1998, in neuroimmunology. The laboratory focuses on abnormal immune-brain interactions and the current ongoing research projects are in multiple sclerosis, schizophrenia, and ALS. Applicants must have extensive experience in molecular biology and immunology. Send curriculum vitae and three references to: **Dr. Saud A. Sadiq, St. Luke's-Roosevelt Hospital Center, Columbia University, Antenucci Building, 432 West 58th Street, Room 117, New York, NY 10019. FAX: 212-523-8859. Equal Opportunity Employer.**

A New Jersey-based law firm (200-plus attorneys) seeks a **SCIENTIFIC/MEDICAL ANALYST** to assist our science group in its work relating to toxic tort and product liability litigation. Responsibilities will include literature review, project management, and science writing and editing. We need an enthusiastic self-starter who has proven communication and project management skills. Must be a team player. Ph.D. preferred. FAX résumé to: **McCarter & English, FAX: 973-624-7070.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN CANCER GENETICS NATIONAL INSTITUTES OF HEALTH (NIH) National Human Genome Research Institute (NHGRI) Cancer Genetics Branch, Bethesda, Maryland

Positions available to study: (1) genetic predisposition and development of human breast cancer; (2) molecular mechanisms contributing to the progression of hormone refractory human prostate cancer. Interest in applying the tools of genetics and human genome scanning, such as cDNA, DNA and tumor array technologies, genotyping, and positional cloning. A recent M.D. or Ph.D. with a strong background in cancer research, molecular biology, or human genetics is required. For more information, contact: **Dr. Olli Kallioniemi, e-mail: okalli@nhgri.nih.gov.**

To apply, please send a statement of research interests, curriculum vitae, and three names or letters of reference to: **Mrs. Sharon McFadden, Cancer Genetics Branch, National Human Genome Research Institute, Building 49, Room 4A06 MSC 4470, Bethesda, MD 20892-4470. FAX: 301-402-3241.**

The NIH is an Equal Opportunity Employer. Applications from women and minorities are encouraged.

POSTDOCTORAL POSITION IN COMPARATIVE AND EXPERIMENTAL PATHOLOGY

**New England Regional Primate Research Center
Harvard Medical School**

Postdoctoral position to examine the role of leukocyte and endothelial adhesion molecules, chemokines, and chemokine receptors in the pathogenesis of AIDS using the SIV macaque model. This project requires a strong background in endothelial biology and tissue culture and an interest in mechanisms of disease. The successful candidate should have a Ph.D. in cell biology or a D.V.M. or M.D. with relevant experience. Please send a cover letter with curriculum vitae and the names of three references to: **Andrew A. Lackner, D.V.M., Ph.D., New England Regional Primate Research Center-Harvard Medical School, One Pine Hill Drive, P.O. Box 9102, Southborough, MA 01772-9102.**

Equal Employment Opportunity/Affirmative Action Employer.

FUNGAL/YEAST MOLECULAR BIOLOGY

POSTDOCTORAL POSITION available immediately to study how pathogenic fungi cause human disease. We use microbiology, genetics, molecular methods, and host-parasite interactions to characterize novel fungal virulence factors (*J. Bacteriol.* 179:157, 1997; *J. Immunol.* 156:3836, 1996; *Microbiology* 142:937, 1996). Funds available from NIH and pharmaceutical industry (through Health Research, Inc.). Excellent opportunities for professional growth. Send résumé and names of three references to: **Dr. V. Chaturvedi, Laboratories of Mycology, Wadsworth Center, New York State Department of Health, Albany, NY 12201-0509. FAX: 518-486-7971; e-mail: vishnu@wadsworth.org. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Postdoctoral position available to study use of fluorescence spectroscopy for detection of premalignant and malignant lesions of the aerodigestive tract. Successful candidate will be responsible for collection of clinical data, data analysis, and publication, and will play key role in extensive collaborative efforts. M.D. or Ph.D. required. NIH-funded appointment is for one year with possibility of renewal, and is available immediately. Applicant should send curriculum vitae and cover letter emphasizing relevant background to: **Dr. Kathleen McMillan, Director, Otolaryngology Research Center, New England Medical Center #187, 750 Washington Street, Boston, MA 02111. FAX: 617-636-1690.**

POSTDOCTORAL POSITION in membrane biophysics. Position available for fluorescence and phosphorescence studies of lateral and rotational motions and spatial distributions of membrane proteins. Individuals with experience in biophysics and in development of laser-optical methods for examining plasma membrane proteins should submit a résumé and the names of three references to: **Dr. Deborah A. Roess, Department of Physiology, Colorado State University, Ft. Collins, CO 80523. CSU is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

GEORGIA INSTITUTE OF TECHNOLOGY PARKER H. PETT INSTITUTE FOR BIOENGINEERING AND BIOSCIENCE

POSTDOCTORAL POSITIONS are available for studies in tissue engineering as part of Georgia Tech's initiative in this emerging field. The thrust areas of our research program are cell technology, construct technology, and the technologies for integration into living systems. Specific applications include cardiovascular and orthopaedic tissue engineering, as well as encapsulated cell systems. Candidates should have a relevant background, a strong interest in one or more of the above fields, and be willing to work in an interdisciplinary environment and interact with both Engineers and Life Scientists. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: **Professor R. M. Nerem, Director, Parker H. Pett Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA 30332-0363. The Georgia Institute of Technology is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

An NIH-funded position is available to study the signal transduction mechanisms related to the effect of nitric oxide on migration and proliferation of vascular smooth muscle cells. Preference will be given to candidates who have a recent Ph.D. and experience in the techniques of modern biochemistry, including molecular biology. Send curriculum vitae and the names of three references to: **Dr. Aviv Hassid, Department of Physiology and Biophysics, University of Tennessee, 894 Union Avenue, Memphis, TN 38163. E-mail: ahassid@physiol1.utm.edu; FAX: 901-448-7126.**

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

POSTDOCTORAL POSITION available to study mitochondrial calcium regulation in living motor neurons. (*J. Neurophysiol. Exp. Neurol.* 56:523-530; *J. Physiol.* 497:2:299-308). Position requires background experience in molecular biology and cell culture; experience with intracellular calcium measurement desirable. Send résumé and names of three references to: **Denise A. Figlewicz, Ph.D., Box 673/Department of Neurology or Shey-Shing Sheu, Ph.D., Box 711/Department of Pharmacology and Physiology, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642. FAX: 716-256-1423; e-mail: dfiglewicz@mail.neurology.rochester.edu or sheus@pharmacol.rochester.edu.**

UR is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two NIH-funded positions available June 1, 1998, to study the role of protein phosphatase 5 (PP5), a component of hsp90 chaperone complexes, in signal transduction by steroid receptors and in the cyclic GMP signaling pathway. Projects studying the molecular genetics of PP5 in model organisms are also available. Send curriculum vitae, including publications in English-language journals, and the telephone numbers of references to: **Michael Chinkers, Ph.D., Department of Pharmacology, University of South Alabama, College of Medicine, MSB 3130, Mobile, AL 36688-0002. The University of South Alabama is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to study the role of the male reproductive tract in HIV disease. Experience in RT/PCR, cloning, and sequencing required; knowledge of histology/cytology preferred. Send curriculum vitae, names of three references, and a brief description of research experience to: **Dr. Ann Kiessling, Laboratory of Reproductive Biology, Department of Surgery, Beth Israel Deaconess Medical Center, Harvard, 4 Blackfan Circle, Room 243, Boston, MA 02115.**

POSTDOCTORAL POSITION

Immediate opening for recent Ph.D. to initiate biochemical and biophysical studies of transporter associated with antigen processing (TAP) mechanisms. Please send curriculum vitae and names of three references to: **Malini Raghavan, University of Michigan, Department of Microbiology and Immunology, 5641 Medical Science Building II, Ann Arbor, MI 48109. FAX: 734-764-3562. E-mail: malinir@umich.edu; website: <http://www.med.umich.edu/microbio/malinir.html>.**

* * * * *

Career Supplement Features

* * * * *

These advertising supplements feature research disciplines and topics that offer exciting opportunities for professional growth for scientists.

Advertisers will reach a targeted audience in addition to having your recruitment message featured in these special sections.

Look for these advertising supplements publishing in SCIENCE.

Issue date
Advertising Supplement
Advertising reservation deadline

17 July
West Coast Careers
30 June

14 August
Careers for BS & MS Scientists
28 July

2 October
European Careers
15 September

16 October
Hot Careers
29 September

20 November
Diversity in the Scientific Workforce
2 November

For advertising information, please contact:

U.S.: Gabrielle Boguslawski
Tel: (718) 491-1607

Fax: (202) 289-6742

E-Mail: science_displayads@aaas.org

Europe: Debbie Cummings
Tel: +44 (0) 1223 302067

Fax: +44 (0) 1223 516208

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

Japan: Masayoshi Yoshikawa
Tel: (+81) 33235-5691
Fax: (+81) 3 3235-5852

Australia: Keith Sandell
Tel: (+61) 02 922-2977
Fax: (+61) 02 922-1100

SCIENCE
www.sciencemag.org

EUROPEAN OPPORTUNITIES



THE UNIVERSITY of LIVERPOOL

Department of Human Anatomy and Cell Biology Derby Chair of Anatomy

Applications are invited for this prestigious Chair which was endowed by the Earl of Derby in 1894, and which became vacant upon the appointment of Professor B A Wood to the Henry Luce Chair of Human Origins, George Washington University.

The Department has a strong research ethos: its current research groupings (Cellular and Molecular Pathophysiology, Cell Signalling, Molecular Mechanisms of Cell Growth and Differentiation, Evolutionary Biology) scored 5 in the 1996 Research Assessment Exercise. Applicants will be expected to have an international reputation in research in any area pertaining broadly to anatomy including, for example, molecular or genetic approaches to vertebrate morphogenesis, sub-cellular functional anatomy, hominid palaeontology. Proven ability to fund and to direct a dynamic research programme is essential. A candidate should also be in sympathy with the Faculty of Medicine's new medical undergraduate curriculum centred on problem-based learning, and should be supportive of the teaching of anatomy to students in medicine and related professions, dentistry, and science. The Derby Chair of Anatomy would normally be associated with the Headship of the Department, but appointment in a separate role might be possible to suit research aspirations.

The salary will be negotiable.

Interested parties are invited to contact the Dean of the Faculty of Medicine, Professor P M Johnson on 0151 706 4261.

Quote Ref: A/312/SC

Closing Date: 24 July 1998

Further particulars and details of the application procedure may be requested from the Director of Personnel, The University of Liverpool, Liverpool L69 3BX on 0151 794 2210 (24 hr answerphone) or via email: jobs@liv.ac.uk

Web site at <http://www.liv.ac.uk>

COMMITTED TO EQUAL OPPORTUNITIES

EUROPEAN OPPORTUNITIES

Pierre Fabre Médicament

seeks for its new High Throughput Screening unit in the south of France a Ph.D Scientist having at least 5 years experience in HTS.

HTS SENIOR SCIENTIST

In direct relationship with scientists from the company and other partners, you will be responsible for elaborating new HTS assays from novel targets and transferring them to a robotic system.

You will be in charge of the complete realization of the automated tests and the interpretation of the results. You will manage the running of HTS unit resources and test scheduling.

Qualified to Ph.D level (or equivalent) in Biology/Biochemistry with excellent skills in molecular and cellular biology, you are familiar with lab automation, robotic systems, software and data base handling. French speaking would be appreciated.

Please send application file (CV + letter + photo), ref D51S to **Pierre Fabre Médicament**, Direction des Ressources Humaines, Parc Industriel de la Chartreuse, 81106 Castres Cedex, France.

e-mail : christine.deydier@pierre.fabre.com

Pharmaceutical
and Cosmetics
company

**Pierre
Fabre**



7000 staff
annual turnover
6.1 Billion FF

POSITIONS OPEN

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

Laboratory of Molecular and Cellular Neurobiology

POSTDOCTORAL POSITIONS are available to study alcohol and anesthetic actions on neurotransmitter-gated ion channels using patch-clamp electrophysiological recording. A strong background in neurophysiology or neuropharmacology is required. *Applicants must be U.S. citizens or permanent residents with fewer than five years of postdoctoral experience.* Applications are due by August 15, 1998.

Send curriculum vitae and three letters of reference to:

Dr. Robert W. Peoples

Unit on Cellular Neuropharmacology
Laboratory of Molecular and Cellular Neurobiology
NIAAA/NIH

Park 5 Building, Room 158
12420 Parklawn Drive MSC 8115
Bethesda, MD 20892-8115

A **POSTDOCTORAL ASSISTANT** position is available in the Molecular Cardiology Section at the University of Cincinnati to study the molecular genesis of cardiac hypertrophy. The discovery of a hypertrophy-responsive transcription factor that is functional *in vivo* and can be coupled to signal transduction events provide the successful candidate multiple avenues of investigation, including the preparation of a transgenic mouse line harboring the DNA target of the factor. Opportunities for investigation into nuclear factors important in cardiac development also exist. Experience in molecular and cellular biology is preferred. Please send your curriculum vitae to:

Michael E. Ritchie, M.D.

University of Cincinnati

Division of Cardiology

231 Bethesda Avenue, ML 0542

Cincinnati, OH 45267-0542

FAX: 513-558-2002

POSTDOCTORAL POSITIONS DEPARTMENT OF ADULT ONCOLOGY DANA-FARBER CANCER INSTITUTE

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

Dr. Kornelia Polyak

Dana-Farber Cancer Institute

44 Binney Street

Boston, MA 02115

Attn: Human Resources, Code KP

E-mail: kpolyak@welchlink.welch.jhu.edu

Equal Opportunity Employer.

Emory University. **POSTDOCTORAL POSITION** available immediately to study the mechanisms of repair of both oxo and anoxic DNA lesions generated by ionizing radiation. Projects involve protein purification and characterization, preparation of DNA substrates containing oxo and anoxic lesions, and kinetic analysis of repair enzymes. Send curriculum vitae and addresses of three references to: Dr. Yoke Wah Kow, Department of Radiation Oncology, Emory University, 145 Edgewood Avenue S.E., Atlanta, GA 30335-3801. E-mail: ykows@emory.edu. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to study the role of RNA structure and RNA-binding proteins in regulating gene expression. A background in biochemistry and molecular biology is preferred. Send cover letter, curriculum vitae, and the names and addresses of three references to: Dr. Paul Babitzke, Department of Biochemistry and Molecular Biology, The Pennsylvania State University, University Park, PA 16802. FAX: 814-863-7024; e-mail: pxb28@psu.edu.

POSTDOCTORAL POSITION available immediately to study the catalytic mechanism of cytochrome c oxidase. Candidates should have experience in chromatographic methods, protein and phospholipid purification, vesicles preparation, and spectroscopic methods (optical, NMR). Send résumé to: Dr. Graham Palmer, Department of Biochemistry and Cell Biology MS 140, Rice University, 6100 Main Street, Houston, TX 77005. E-mail: fabian@bioc.rice.edu. *Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL FELLOW NATIONAL HUMAN GENOME RESEARCH INSTITUTE National Institutes of Health

The positional cloning section of the Genetics and Molecular Biology Branch at the National Human Genome Research Institute, NIH, is seeking an outstanding Postdoctoral Fellow in molecular genetics, with experience in positional cloning, to start April 1, 1998. The successful candidate will join an enthusiastic group working on the genetics of non-insulin dependent diabetes mellitus (NIDDM). The study utilizes an affected sib-pair strategy and has completed a genome scan on over 500 affected sib pairs from Finland. The Postdoctoral Fellow will be expected to contribute to the fine mapping and eventual positional cloning of genes predisposing to NIDDM.

Please send curriculum vitae with names and addresses of three references to:

Dr. Francis Collins, M.D., Ph.D.

Building 49, Room 3A14

9000 Rockville, Pike

Bethesda, MD 20892

Telephone: 301-496-1906

FAX: 301-402-4929

The NIH is an Equal Opportunity Employer. Applications from women and minorities are encouraged.

Two **POSTDOCTORAL POSITIONS** available to study molecular biology and biochemistry of mineral elements. A boron project will clone and identify boron transport genes and proteins using mutagenesis and expression cloning. Research experience in transport and/or yeast genetics is desirable. A selenium project will use molecular biology approaches to characterize molecular mechanisms used for selenium homeostasis and to determine selenium requirements. Research experience in mRNA stability, construction and expression of recombinant genes, mineral molecular biology, cell culture, or working with transgenic animals is desirable. Applicants should have a Ph.D. in biochemistry, molecular biology, or a related area. Send letter of interest, curriculum vitae, representative publications, and names of three references to: Dr. Roger A. Sunde, Nutritional Sciences, 217 Gwynn Hall, University of Missouri, Columbia, MO 65211. Website: <http://www.missouri.edu/~nutsci/boron.htm>. *The University of Missouri is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOW

A position is available to study the role of endotoxin in antibacterial host defenses. Murine models of infection will be used to study cytokine responses, LPS and intracellular signaling, as well as interactions between cell subpopulations. Applicants should have a strong background in molecular approaches to cell biology and cytokine analysis. The position will be available for four years.

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

POSTDOCTORAL POSITION available immediately to study the regulation of nitric oxide synthase type 2 expression in astrocytes, C6 cells, and autoimmune diseases (MS and EAE). Candidates should have expertise in gene promoter analysis (EMSA, footprint), inflammatory signal transduction pathways (NFkB, JAK-STAT, MAPKs), and mRNA quantification. Experience with cell culture, protein analysis, and/or induction of EAE in mice and rats would be desirable. Send curriculum vitae and names of three references to: Douglas L. Feinstein, Department of Neuroanesthesia, University of Illinois at Chicago, 900 South Ashland Avenue, MC 513, Room 4302, Chicago, IL 60607. E-mail: dlfeins@uic.edu.

POSTDOCTORAL POSITIONS available at the University of Tennessee, to study (1) the role of MHC and cytokines in controlling susceptibility to autoimmune disease, or (2) the role of MMPs and collagenases in degenerative joint disease. Projects involve both cellular and molecular approaches using transgenic and knockout models. Send curriculum vitae and names of three references to: Dr. Edward Rosloniec or Dr. Karen A. Hastay, Reserach Service (151), 1030 Jefferson Avenue, Memphis, TN 38104. E-mail: crosloniec@utmem1.utmem.edu.

POSITIONS OPEN

POSTDOCTORAL RESEARCH PROGRAM for Environmental Protection Agency. Project #NRMRL 98-1: research on investigating selective adsorption of premetallized dyes from textile waste water is available at the National Risk Management Research Laboratory in Cincinnati. Background in separation technologies, textile chemistry, dye chemistry, complex organic chemistry, or chemical engineering is preferred. Project #NRMRL 98-2: research on investigating the combustion-related formation mechanisms of toxic organic products of incomplete combustion is available at the National Risk Management Research Laboratory in Research Triangle Park, North Carolina. Background in chemistry or chemical engineering with experience in organic reaction engineering from combustion-related pollutants helpful. For both projects annual stipend begins at \$40,000. A degree received within last three years is preferred. For additional information: Postdoctoral Research Program, National Risk Management Research Laboratory/EPA, Attn: P. Pressley, ORISE—MS 36, P.O. Box 117, Oak Ridge, TN 37831-0117. FAX: 423-241-5220; e-mail: presslep@ora.gov. Reference appropriate project number given above.

POSTDOCTORAL POSITIONS DANA FARBER CANCER INSTITUTE HARVARD MEDICAL SCHOOL

To study (1) protein phosphorylation and transcription factor interaction in the regulation of myeloid cell differentiation, and monocyte gene expression in inflammation and stress; (2) molecular mechanisms involved in transcriptional responses to hypoxia in prostate carcinoma; and (3) molecular regulation of double-stranded DNA repair. A strong background in molecular biology and biochemistry required.

Contact: Dr. Stuart Calderwood and Dr. C. Norman Coleman, Department of Adult Oncology and Joint Center for Radiation Therapy, Dana Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. *Equal Opportunity/Affirmative Action Employer.*

Clinical chemistry **POSTDOCTORAL FELLOW-SHIPS** at Mayo Clinic. Seeking applicants for two-year ComACC-approved Fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1998, will be considered for appointment beginning in July 1999. Contact: Mary F. Burritt, Ph.D., Division of Clinical Biochemistry and Immunology, Mayo Clinic, Rochester, MN 55905 for more information. *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

POSTDOCTORAL POSITION immediately available in NIH-funded laboratory to study the biochemistry, molecular pharmacology, and clinical utility of receptor guanylyl cyclases. This position requires a Ph.D. and/or M.D. and experience in molecular biology, protein biochemistry, and the analysis of receptor and enzyme structure and function. *Must be a U.S. citizen or permanent resident.* Send curriculum vitae and three letters of reference to: Dr. S. A. Waldman, Division of Clinical Pharmacology, Thomas Jefferson University, 132 South 10th Street, 1170 Main, Philadelphia, PA 19107. E-mail: waldmans@jeflin.tju.edu. *Equal Opportunity Employer.*

Two **POSTDOCTORAL POSITIONS** available to study control mechanisms and structure-function relationships of the NO synthases. Projects involve spectroscopy, rapid kinetics, thermodynamics, and mutational analysis. Ph.D., publications, and expertise in protein biochemistry, molecular biology, enzymology, crystallography, or chemistry is preferred. Send curriculum vitae to: Dr. Dennis Stuehr, Department of Immunology, NN10, Lerner Research Institute, Cleveland Clinic, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-444-9329; e-mail: stuehrd@cesmtp.ccf.org.

Two **POSTDOCTORAL POSITIONS** in the interface of molecular biology and chemistry available to dissect mammalian signaling networks. The first position requires candidates with extensive experience in molecular biology, cell culture. The second position requires candidates with a Ph.D. in synthetic chemistry. Send curriculum vitae and references to: C. Wilson Xu, Ph.D., Box 362, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021. E-mail: w-xu@ski.mskcc.org. *An Equal Opportunity/Affirmative Action Employer.*



National Institute of Allergy and Infectious Diseases

Confocal Microscopist, NIAID, NIH

The National Institute of Allergy and Infectious Diseases (NIAID), NIH, seeks a dynamic individual to run its newly established Advanced Microscopy/Imaging Facility. The individual will manage a centralized 3-laser (plus UV laser) Scanning Confocal Microscope (a Leica TCS SP, with Imaging Spectrophotometer). The facility will also include other Image Capture technologies and Graphics Workstations. Duties include the operation and maintenance of the equipment and provision of confocal services, consultations, training, and technical support for user operation. Preference will be given to qualified candidates with extensive microscopy/imaging experience and demonstrated expertise in Confocal Microscopy. Salary will depend upon experience and qualifications. Interested candidates should submit a curriculum vitae, bibliography, three letters of reference, and detailed statement of research interests and selected publications by August 15, 1998, to:

Dr. Jonathan Yewdell
Search Committee Chair
4 Center Drive-MS C 440
Bethesda, MD 20892-0440

*NIH is an Equal Employment
Opportunity Employer.*

GLOBAL PRIZE

CALL FOR NOMINATIONS



1998 Field: Energy Science and Technology

The AUSTRALIA PRIZE is a prestigious international award for outstanding achievement in areas of science and technology.

The AUSTRALIA PRIZE:

- Promotes the positive impact of science and technology on human welfare;
- Has a cash award of \$350,000; and
- Is commemorated by an inscribed Medal.

Nominations are now being sought in the area of Energy Science and Technology. Nomination forms and further information are available from the AUSTRALIA PRIZE Secretariat:

AUSTRALIA PRIZE

GPO Box 9839

CANBERRA ACT 2601, AUSTRALIA

Telephone: 61 2 6213 6454

Facsimile: 61 2 6213 6422

Email: ausprize@dist.gov.au

Nominations close on 31 July 1998.



Previous Winners

The 1998 AUSTRALIA PRIZE was awarded to four scientists in the field of molecular genetics. Professor Elizabeth Blackburn, of the University of California, San Francisco, was awarded the Prize for the identification of an enzyme crucial to the successful replication of chromosomes in cell division. Melbourne's Walter and Eliza Hall Institute of Medical Research Director, Professor Suzanne Cory, was recognised for her landmark cancer research which has resulted in a fundamental change in the approach of research in this field. Professor Sir Alec Jeffreys, the Royal Society Wolfson Research Professor at the University of Leicester, United Kingdom, discovered and then developed DNA fingerprinting and DNA profiling, technologies regarded as among the most effective tools in modern crime detection. Professor Grant Sutherland, Director of the Department of Cytogenetics and Molecular Genetics at the Women's and Children's Hospital in Adelaide, received his award for discoveries in inheritance that has caused a landmark shift in conventional genetic theory.

C O M P E T I T I V E A U S T R A L I A

EUROPEAN OPPORTUNITIES

Call for Proposals

BMBF Competition "BioFuture"

The Federal Ministry of Education, Science, Research and Technology (BMBF) intends to give **younger scientists** from Germany and abroad who are already **experienced in heading a research group** the opportunity to work on new, basic research-oriented approaches in the biosciences in Germany, independently and in their own team in order to generally improve chances for a further career in science or economy in Germany or to aim at self-employment in the private sector (e.g., by setting up businesses or spin-out companies) in the medium term.

The teams (staff: 1 group leader, 1-2 postdocs, 1-2 doctoral students, 1-2 technicians; investments and expendable materials; depending on technical support required each) are to work for a period of 5 years on topics in the frontiers of biology and neighbouring disciplines such as chemistry, physics, mathematics, informatics, engineering sciences, nanotechnology, etc.

For the projects selected by a jury, nonrepayable grants will be awarded in the form of project funding.

Deadlines: May 15, 1998 (first call), July 15, 1998 (second call), January 15, 1999 (third call).

Further information:

Internet: <http://www.kfa-juelich.de/beo/biofutur.htm>
or Forschungszentrum Jülich GmbH
Projekträger Biologie, Energie, Umwelt
D-52425 Jülich, Germany
tel.: +49 2461 61-4296 or -3855;
fax: +49 2461 61-2730 or -2690

GLOBAL OPPORTUNITIES

The Institute of Materials Research and Engineering (IMRE) is a young and growing national institute in Singapore involved in Materials R&D. Positions are open for:

Cellular Neurobiologist / Cell Biologist Position

The Tissue Engineering Initiative in IMRE seeks an individual with background / interest in neuron growth, adhesion and migration, to study the behavior, dynamics & functions of cultured neurons. Successful candidate will work with chemists, engineers, clinicians and biologists in the National University of Singapore & the Johns Hopkins University on the development of nerve guide channel to facilitate nerve regeneration. There is possibility to develop a small group in the program with exciting opportunities for further career development. A PhD or MD degree or equivalent, with relevant experience demonstrated in referred publications is required.

The position has a compensation (commensurate with experience) equivalent to US\$50,000 - US\$60,000 p.a. For more information, please email to nmyuh@nus.edu.sg or kleong@bme.jhu.edu.

Postdoctoral Research Associate / Research Fellow Senior Research Fellow (OLEDs)

PhD or equivalent experience is required in Chemistry, Materials Science, Electronic Engineering, Chemical Engineering, Applied Physics, Solid State Physics or related fields. A track record of accomplishments should be demonstrated in research on materials, devices and processes in one or more of the following specialty areas:

- Design and fabrication by molecular self-assembly of charge transporting and other interlayers
- Fabrication, processing, and evaluation of polymer light-emitting devices as well as related interface studies
- Development and evaluation of new barrier materials and flexible substrates as well as packaging technology

Base compensation ranges from S\$36,000 to S\$138,000.

IMRE offers attractive benefits including medical insurance, leave and performance-based bonuses etc. Depending on type of contract offered, end-of-contract gratuity or Central Provident Fund equivalent to 20-25% of salary, housing allowance, initial relocation allowance and possible children's education allowance may also be provided.

Interested applicants, please send CV including complete list of publications and email addresses / FAX/phone numbers of 3 references to the address below:



The Recruitment Officer
Institute of Materials Research & Engineering
National University of Singapore

10 Kent Ridge Crescent, Blk S7, Level 3 Singapore 119260

Only shortlisted applicants will be notified. Please refer to <http://www.imre.org.sg> for more information on IMRE.

POSITIONS OPEN

POSTDOCTORAL POSITION(S) available immediately.

Position One: structural and functional genomics. Participate in construction of cDNA libraries for a multi-university EST sequencing project and in their analysis by global gene expression methods including high-density expression arrays and development of microarray technology for use in soybean. Experience in molecular biology required, preferably including cloning and mRNA analysis.

Position Two: transformation and molecular analysis of transgenic plants. Transformation of soybean via somatic embryogenesis and/or *Agrobacterium tumefaciens* using constructs for modulation of expression of proteins and pathways in developing seeds and plants. Projects also include transformation of *Arabidopsis* as a test system. Experience with tissue culture required and molecular biology experience preferred. Excellent facilities, equipment, and space are available for research. Salaries commensurate with experience. Review of applications will begin July 1, 1998, and continue until suitable candidates are identified. Send curriculum vitae including a brief statement of your research background and interests, transcripts or summary of graduate coursework, and three letters of reference to: **Dr. Lila Vodkin, 384 Madigan Biotechnology Laboratory, Department of Crop Sciences, 1201 West Gregory Drive, University of Illinois, Urbana, IL 61801. E-mail: l-vodkin@uiuc.edu.**

POSTDOCTORAL POSITION IN MOLECULAR NEUROSCIENCE

A Postdoctoral position is available immediately to study the effects of alcohol on NMDA receptor function and synaptic plasticity. Areas of interest include NMDA receptor phosphorylation, clustering, trafficking, subunit composition, and coupling to nitric oxide synthase. A second and related area of interest is NMDA receptor modulation of Ras/MAP kinase signaling in relation to neuronal growth/death. Applicants should have experience in molecular and/or biochemical techniques. Send curriculum vitae and names of three references to: **L. Judson Chandler, Department of Pharmacology, Louisiana State University Medical Center, 1501 Kings Highway, Shreveport, LA 71130. FAX: 318-675-7857; e-mail: jchand@gmail.phar.lsumc.edu.** *LSUMC is an Affirmative Action Employer.*

POSTDOCTORAL POSITION IN MOLECULAR RETROVIROLOGY

Available immediately to participate in ongoing research projects on simian immunodeficiency virus (SIV). Current projects focus on (1) the significance of SIV coreceptor usage for AIDS immunopathogenesis and (2) the mechanisms of SIV replication in the brain determined by *env* and *nef* genes. The successful Postdoctoral candidate is expected to have a strong background in virology, molecular biology, and/or immunology. Please send a letter of interest, curriculum vitae, and three references to: **Toshiaki Kodama, D.V.M., Ph.D., Division of Pathobiology and Immunology, Oregon Regional Primate Research Center, 505 185th Avenue N.W., Beaverton, OR 97006.** *The Oregon Regional Primate Research Center is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS. Departments of Molecular and Cellular Biology and Organismic and Evolutionary Biology, Harvard University. A limited number of Postdoctoral Research positions become available from time to time. Some appointments are funded through research grants awarded to faculty members and are ordinarily for one year, sometimes renewable; other appointments are possible through Postdoctoral Fellowships. For a list of faculty members who may have Postdoctoral positions available, write to the respective department office (do not send applications): **Department of Molecular and Cellular Biology, 7 Divinity Avenue, Cambridge, MA 02138** or **Department of Organismic and Evolutionary Biology, 26 Oxford Street, Cambridge, MA 02138.** *Harvard University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION in yeast signal transduction. Position available July 1, 1998, to study the regulation of phospholipase D in *Saccharomyces cerevisiae* (*Biochem. J.* 307:799-805, 1995) and *Candida albicans* (*Microbiol.* 143:3521-3526, 1997). Experience in either molecular genetics of yeasts or lipid metabolism/chemistry required. Send curriculum vitae, statement of research experience and interests, and three letters of reference to: **Dr. Joseph W. Dolan, Department of Microbiology and Immunology, Medical University of South Carolina, Charleston, SC 29425. E-mail: dolanjw@muscc.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITION IN GENE THERAPY OF EYE DISEASES

Positions are available for postdoctoral research in the Center for Macular Degeneration at the University of Iowa. The positions involve gene therapy of eye diseases. Research objectives include the development of vectors for gene transfer to the retina and coordination with Researchers developing animal models of macular degeneration.

A Ph.D. is required. Training in molecular biology, retinal physiology, animal models, and histology are desirable. Experience with recombinant DNA technology including but not limited to virology is also desirable. Must be capable of interacting with a productive research team involved in the development of new vectors and the identification of novel disease genes.

Interested candidates are invited to submit curriculum vitae and three letters of reference to:

**Beverly L. Davidson, Ph.D.
University of Iowa College of Medicine
200 EMRB
Iowa City, IA 52242-1091
E-mail: beverly-davidson@uiowa.edu**

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

POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY

A position is available in the research laboratory of **Dr. Byrd Quinlivan** of the Division of Infectious Diseases and the Lineberger Cancer Research Center at the University of North Carolina. The laboratory has basic, applied, and epidemiology projects in the molecular virology of human herpesvirus 8 (KSHV). This position will study the role of KSHV gene products in viral reactivation and viral gene expression, with an emphasis on the role of the ORF 50 gene product. Experience in molecular cell biology or molecular virology is required. Starting salary will be commensurate with experience.

Please submit a letter of interest and curriculum vitae to: **Byrd Quinlivan, M.D., CB# 7030, University of North Carolina, Chapel Hill, NC 27599. E-mail: ebq@med.unc.edu; FAX: 919-966-6714.**

POSTDOCTORAL POSITION YALE UNIVERSITY SCHOOL OF MEDICINE Department of Cellular and Molecular Physiology

A Postdoctoral position in neurophysiology is available to study the development and distributed plasticity of neural networks *in vitro*. Highly motivated individuals with experience in patch-clamp electrophysiology and interest in information processing in biological neural networks are encouraged to apply.

Please send curriculum vitae and the names of three references to: **R. M. Fitzsimonds, Department of Cellular and Molecular Physiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520-8026. E-mail: reiko_fitzsimonds@qm.yale.edu.**

POSTDOCTORAL FELLOW VANDERBILT UNIVERSITY

We are seeking a Research Associate to study signal transduction mechanisms in lymphocyte differentiation, growth, and survival using model transgenics (*JEM* 185: 1897, 1997; *PNAS* 94:10057, 1997). Minimum requirements include Ph.D. and/or M.D. degree(s) and significant research experience in molecular and cellular immunology.

Please send your résumé with the names and addresses of three references to: **Dean W. Ballard, Ph.D., c/o Kathy Favaloro, Vanderbilt University Medical Center, 802 Light Hall, Nashville, TN 37232-0295. FAX: 615-343-4726; e-mail: britta@hhmi.org.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION to study transcriptional control of hematopoietic proliferation and differentiation. This research will partially focus on the function of human counterparts of fungal nuclear migration genes in hematopoietic cell growth. Strong background in molecular biology required. Send curriculum vitae and names of reference to: **Barbara A. Miller, M.D., Division of Pediatric Hematology/Oncology, Box 850, Hershey Medical Center, Hershey, PA 17033.** *The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE POSITION AVAILABLE IMMEDIATELY

Postdoctoral Research Associate position available immediately for recent Ph.D. or M.D.-Ph.D. graduate in cellular or molecular biology with an interest in lipoxygenases. The project involves the study of novel lipoxygenases found in tumor cells and examination of their regulation at both the transcriptional level and posttranslational level. Successful candidates should have demonstrated experience with standard molecular biology and cell biology techniques. Previous experience with arachidonic acid metabolism is desirable. Preference will be given to candidates with demonstrated research ability and strong written communication skills. Minimum salary \$28,000 dependent upon experience. Please send a brief statement of research interests, capabilities, and goals; curriculum vitae; address, FAX and telephone numbers; and three references to: **Dr. Kenneth V. Honn, Professor, Re: Lipoxygenases, 431 Chemistry Building, Wayne State University, Detroit, MI 48202. E-mail: k.v.honn@wayne.edu.**

Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at Wayne State University are smoke-free. Wayne State University—people working together to provide quality service.

POSTDOCTORAL POSITION WITH DR. EDOUARD CANTIN

The Department of Neurology at City of Hope National Medical Center/Beckman Research Institute has an immediate vacancy for a Postdoctoral Fellow. Research will involve studying the role of inflammatory cytokines produced in response to herpes simplex virus (HSV) infection in the mouse nervous system using null mutant mice for various cytokine genes. A Ph.D. and experience in molecular virology and/or viral immunology of herpes simplex virus infections is highly desirable. Interested candidates should send curriculum vitae and contact information of three references to: **Human Resources, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 626-301-8182; e-mail: cohapply@smtpink.coh.org.** Please reference #17159. *Equal Opportunity Employer.*

UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

POSTDOCTORAL POSITION available immediately to perform neurophysiology experiments in behaving monkeys to study functions of brain monoaminergic systems. The successful applicant will join an active group recording noradrenergic and dopaminergic neurons in locus coeruleus and midbrain during performance of cognitive tasks aimed at testing the roles of these systems in attention, reinforcement, and learning. Applicants with neurophysiology experience preferred. Excellent salary and benefits. Send curriculum vitae and names of three references to: **Dr. Gary Aston-Jones, Department of Psychiatry, University of Pennsylvania, VAMC (151), University and Woodland Avenues, Philadelphia, PA 19104.**

POSTDOCTORAL POSITIONS IN PROTEIN CHEMISTRY, MOLECULAR BIOLOGY, AND MEMBRANE BIOPHYSICS

A new molecular cardiology institute has been formed at SUNY Stony Brook. Postdoctoral positions are available within this institute to study cardiac and neural K⁺ channels, pacemaker channels, and Na⁺/K⁺ pumps using multidisciplinary approaches. The Ph.D. is required in biochemistry, molecular biology, physiology, or a related field in the biological sciences. Salary \$25,000 to \$31,000. Please send curriculum vitae and two letters of recommendation to: **Dr. Ira Cohen or Dr. David McKinnon, Department of Physiology, SUNY Stony Brook, Stony Brook, NY 11794-8661.**

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Examine intracellular trafficking of fluorescent lipids or proteins by multiphoton imaging, lipid domains in membranes, and lipid-protein interactions. Ph.D. in biochemistry, chemistry, microbiology, or related field desirable. Send résumé and three letters of reference to: **Dr. F. Schroeder, Department of Physiology and Pharmacology, Texas A&M University, Texas Veterinary Medical Center, College Station, TX 77843-4466.** *Texas A&M University is an Affirmative Action/Equal Opportunity Employer.*



As the oldest tertiary education institution in Hong Kong, the University of Hong Kong has attained unparalleled achievements since 1911 in Hong Kong and the region by drawing on the great cultural traditions of China and the West. The University is a major research institution with nine faculties and 100+ departments and sub-divisions of studies and learning, and a full- and part-time postgraduate and undergraduate student body of almost 15,000, including 4000 postgraduate students. Our firm commitment to research excellence and internationalisation has established us as one of the top universities in the Region. We are committed to our vision of globalisation and enhancing our research excellence.

Assistant Professor (non-clinical) in Oncology

Applications are invited for appointment as Assistant Professor (non-clinical) in Oncology (Ref.: RF-97/98-87) in the Department of Radiation Oncology, tenable from 1 October 1998 or as soon as possible thereafter. The appointment will initially be made on a fixed-term basis of three years, with a possibility of renewal. The Department of Radiation Oncology is part of an oncology centre running clinical service with Queen Mary Hospital, Hong Kong, for treating all types of cancers using radiotherapy, chemotherapy and biological therapy. The Department also actively engages in cancer research and teaching of both undergraduate and postgraduate students. In extending its research activities, the Department commissions basic research in oncology.

Applicants must possess a PhD and postdoctoral experience in areas of radiation biology or cancer research, with an excellent record of published research and be able to work independently. Preference will be given to those who were successful in obtaining external grants, supervising research projects and performing translational research. The appointee will be responsible for establishing and leading a new laboratory; initiating programmes for basic research in oncology; and will need to work in close collaboration with the clinical staff of the Department to develop an active research programme and to contribute to both undergraduate and postgraduate teaching of the Department.

Annual salary [attracting 15% (taxable) terminal gratuity] for an Assistant Professor (in the grade of Lecturer) is on an 11-point scale, with starting salary depending on qualifications and experience: HK\$522,780 - HK\$873,360* (approx. US\$65,808 - US\$109,936; US dollar equivalents as at 2 June 1998). *An appointee with an annual salary at HK\$698,520 (approx. US\$87,936) or above may be considered for the award of the title of Associate Professor.

At current rates, salaries tax will not exceed 15% of gross income. The appointment carries leave, medical and dental benefits and an allowance for children's education in Hong Kong. In most cases, a

financial subsidy for private tenancy may also be provided, at a charge of a percentage of salary, currently 7.5%.

Further particulars and application forms can be obtained on WWW at <http://www.hku.hk>; or from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax (852) 2540 6735 or 2559 2058; E-mail: APPTUNIT@REG.HKU.HK. Closes 24 July 1998.

The University is an equal opportunity employer and is working towards a smoke-free environment

National Health Research Institutes (NHRI), Taiwan, R.O.C. Director Position, Division of Cancer Research

The NHRI—a newly established, nonprofit research organization supported by the Government of Taiwan, Republic of China—cordially invites qualified individuals to apply for the director position in the Division of Cancer Research. The director's responsibilities include planning, development, implementation, promotion, and coordination of various research and clinical programs related to cancer study. Candidates should hold an M.D. or Ph.D. degree in life science and have been in a leadership position for more than five years with proven track records in cancer clinical and/or scientific research. The Division should serve as a leader in the Cancer field in Taiwan, both in research and clinical practice leading to the betterment of Taiwan people. The Division should also serve as a crucial link from Taiwan to other institutions overseas. Currently, the Cancer Division has clinical programs, research programs, and clinical trial programs with multicenters.

Candidates should possess strong leadership qualities in medicine, science, and administration and be highly innovative, creative, communicative, and dynamic. S/he should also be familiar with Taiwan scientific and medical community, proficient in the Chinese language, and capable of working effectively in the research environment under current circumstances in Taiwan. Salary will be highly competitive.

Apply to: President Cheng-Wen Wu (Tel: 886-2-2653-4401 ext. 8000; ken@nhri.org.tw).

The application should include a complete curriculum vitae, all medical certification (such as Board certification), 5 representative papers, and five or more names/addresses for references/recommendations. (Mission statement of the Division is available upon request.)
Closing Date: August 20, 1998.

Chemist Positions

The Division of Biotechnology and Pharmaceutical Research (DBPR) is embarking on a drug discovery program based on combinatorial chemistry, structure-based drug design, and high-throughput bioscreening. Positions open for chemists in various disciplines. Synthetic chemists should have demonstrable experience in total synthesis or methodology development. Knowledge in solid-phase synthesis is preferable. Computation chemists should have experience in molecular modeling and database manageable (Oracle). Analytical chemists should have hands-on experience in HPLC, LC/MS, GC/MS, and NMR. Experience in natural products isolation and structure elucidation is highly welcome.

Apply to Director of DBPR: Ming-Chu Hsu, Ph.D. (ext. 6110)

Investigator and Postdoctoral Fellow Positions

Positions open at the level of Assistant Investigator, Associate Investigator, and Investigator at the following Divisions. Postdoctoral fellow positions are also available. Candidates should have a Ph.D. or equivalent in related fields. The Division of Clinical Research (DCR) seeks specialists in infectious diseases and/or medical microbiology. **Apply to Directors:**

Division of Biostatistics: Chao Agnes Hsiung, Ph.D. (ext. 7110)

Division of Cancer Research: Jacqueline Whang-Peng, M.D. (Tel: 886-2-2875-7224)

Division of Clinical Research: Monto Ho, M.D. (ext. 7120)

Division of DBPR: Ming-Chu Hsu, Ph.D. (ext. 6110)

Division of Molecular and Genomic Medical Research: Hsing-Jien Kung, Ph.D. (ext. 6120)

Application for Investigator and Postdoctoral Fellow Positions should include:

- (1) A letter of intent
- (2) Curriculum vitae and publication list
- (3) A copy each of five major recent publications
- (4) Three recommendation letters
- (5) Research plan

Address:

**National Health Research Institutes
128 Yen-Chiu-Yuan Road, Sec II
Taipei 115, Taiwan, R.O.C.
NHRI Website: <http://www.nhri.org.tw>
Tel: 886-2-2653-4401
Fax: 886-2-2651-3723**

POSITIONS OPEN

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately for a **NEUROBIOLOGIST** to study drug- and disease-induced regulation of gene expression in the central nervous system. The Molecular Pathophysiology Program provides the opportunity to conduct research in the investigation of drug- and disease-induced neuroplasticity changes, and the pathophysiology of neuropsychiatric disorders. The project involves (1) localization of gene(s) whose expression is influenced by either drug treatments or major neuropsychiatric disorders; (2) elucidating the function(s) of the genes in the central nervous system; and (3) characterizing the factors governing the regulation of the genes. The successful candidate will have a Ph.D. in anatomy, neuroscience, or a related discipline. Experience with *in situ* hybridization, immunohistochemistry, and basic molecular biologic methodologies is required. Please send full curriculum vitae, brief statement of research interest, plus names and addresses of three references to: **Dr. H. K. Manji, Schizophrenia and Mood Disorders Clinical Research Division, Department of Psychiatry and Behavioral Neurosciences, Wayne State University School of Medicine, 5V DRH, 4201 St. Antoine Boulevard, Detroit, MI 48098. Telephone: 313-966-7544; e-mail: hmanji@med.wayne.edu.** Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at WSU are smoke-free. Wayne State University—people working together to provide quality service.

ANTICIPATED POSTDOCTORAL RESEARCHER

The Pennington Biomedical Research Center, a research facility of Louisiana State University, seeks qualified applicants for a Postdoctoral Researcher in the Obesity and Women's Health Research Program. Opportunities involve work with fat substitutes in a long-term diet study; longitudinal assessments of energy balance in perimenopausal women; and studies of dietary fat and insulin action. Requires a Ph.D. or M.D.-Ph.D. in nutrition, metabolism, or related field. Please submit cover letter and résumé by July 19, 1998, or until suitable applicant is found.

**Evelyn P. Bennett, Assistant Director, HRM
Ref: Women's Health Research
Pennington Biomedical Research Center
6400 Perkins Road
Baton Rouge, LA 70808**

POSTDOCTORAL RESEARCH ASSOCIATE

Postdoctoral position available to study the influence of triple-helical DNA structures on DNA replication. Candidates should have Ph.D. in biophysics combined with a strong background in molecular biology. Experience in analysis of DNA replication by two-dimensional gel-electrophoresis, chemical probing of DNA, and electrophoretic separation of DNA topoisomers is highly desirable. Position available immediately. Salary commensurate with experience. Please send curriculum vitae and three reference letters by July 3, 1998, to: **Dr. Sergei Mirkin, Department of Molecular Genetics, University of Illinois at Chicago, 900 South Ashland Avenue, Chicago, IL 60607. E-mail: mirkin@uic.edu.**

POSTDOCTORAL POSITION UNIVERSITY OF PITTSBURGH CANCER INSTITUTE

Applications are invited for a Postdoctoral position to join in ongoing studies on mechanisms of induction of and protection from apoptosis of lymphocytes by tumors. Candidates should have recent Ph.D. degree with strong background in molecular and cell biology. Interested candidates should send curriculum vitae, summary of research interests and experience, and three references to: **Hannah Rabinowich, Ph.D., Department of Pathology, University of Pittsburgh, BST W1054, 211 Lothrop Street, Pittsburgh, PA 15213.**

POSTDOCTORAL POSITION in the Jonsson Cancer Center at UCLA. Signal Transduction Program. T-cell activation—protein kinase cascades and transcriptional activation of genes. *U.S. citizens/greencard holders only.* Send curriculum vitae, statement of research interests, and three references to: **Dr. André Nel, M.D., Ph.D., UCLA Department of Medicine and Jonsson Cancer Center, 52-175 CHS, 10833 Le Conte Avenue, Los Angeles, CA 90095-1680. E-mail: anel@med1.medsch.ucla.edu.** Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Position is available to study mechanisms of transcription regulation by proto-oncogene transcription factors. The laboratory is investigating the molecular architecture and regulatory functions of transcription factor complexes. We are particularly interested in protein-induced changes in DNA structure and the assembly and function of multiprotein regulatory complexes. Our studies focus on transcription factors that play important roles in the regulation of genes in the immune system. The successful applicant will have training in biochemistry or molecular biology and a record of productivity in research. For additional information and recent references, please see our website: www.umich.edu/~hhmi/. Please send your application with curriculum vitae and the names of three references to: **Dr. Tom Kerppola, Department of Biological Chemistry, University of Michigan School of Medicine, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0650. E-mail: kerppola@umich.edu.** Equal Opportunity Employer.

POSTDOCTORAL POSITION to study the functions and site-specific localization of the alpha 7 beta 1 integrin isoforms in normal, dystrophic, and recombinant skeletal muscle. Recent Ph.D. candidates with experience in molecular or cell biology are preferred. To start August 1998 or reasonably thereafter. Send curriculum vitae, brief summary of research experience, and names of three references to: **Stephen J. Kaufman, Ph.D., University of Illinois, Department of Cell and Structural Biology, B107 CLSL, 601 South Goodwin, Urbana, IL 61801. FAX: 217-244-1648; e-mail: stephenk@uiuc.edu.**

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

SYMPOSIUM

MOLECULAR INTERACTION TECHNOLOGIES 1998. October 19–20, 1998, Cathedral Hill Hotel, San Francisco. Keynote: **S. Schreiber, Harvard.** Speakers: **C. Barbas, Scripps; P. Bartel, Myriad; H. Blau, Stanford; R. Brent, UCB; J. Broach, Princeton; G. Crabtree, Stanford; R. Cramer, Switzerland; W. Dower, Affymax; S. Fields, University of Washington; M. Gilman, Ariad; H. Hoogenboom, Netherlands; J. Kochan, Hoffmann-La Roche; P. Legrain, Institute Pasteur; L. Loebe, University of Washington; G. Nolan, Stanford; C. Pabo, Princeton; A. Plückthun, Zurich; D. Payan, Rigol; M. Roth, Tularik; G. Rubin, UCB; E. Ruoslahti, Burnham Institute; R. Sauer, MIT; P. Schultz, UCB; P. Sternberg, Cal Tech; J. Thorner, UCB; R. Tsien, UCSF; M. Vidal, MGH; J. Wells, Genentech; M. Wickens, University of Wisconsin; K. Xanthopoulos, Aurora. Abstracts due August 31, 1998. Organizers: **S. Fields, R. Balint, J. Larrick.** Sponsor: **Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 650-694-1420; FAX: 650-694-7717; e-mail: paimm@netgate.net; website: www.pano.com/paimm.****

MEETINGS

The Second Joint Meeting of the International Cytokine Society and The International Society for Interferon and Cytokine Research: 25–30 October, 1998, Jerusalem, Israel.

Deadline for submissions of abstracts: June 30, 1998. For further details please visit the website: www.kenes.com/cyto98 or contact:

**ICS and ISICR Secretariat
Second Joint Meeting
Kenes, Organizers of Congresses and Tours Ltd.
P.O. Box 50006
Tel Aviv 61500 Israel**

ANNOUNCEMENTS

INTERNATIONAL MYASTHENIA GRAVIS WORKSHOP

Mysore, India, November 8–10, 1998

Travel awards for students and postdoctorates. For program and abstract forms contact: **Prof. Premkumar Christadoss, Department of Microbiology and Immunology, 3.142A MRB, University of Texas Medical Branch, Galveston, TX 77555-1070. Telephone: 409-772-5857; FAX: 409-747-6869; e-mail: pchrista@utmb.edu.**

EUROPEAN OPPORTUNITIES

The Swiss Federal Institute of Technology Zurich (ETHZ) invites applications for a

PROFESSORSHIP OF SOIL CHEMISTRY

The specialist field of this Chair is chemical processes between the soil matrix, the soil solution, and the soil atmosphere (i.e., weathering, adsorption and desorption, ion exchange and ionic complex formation, redox processes, etc.) and chemical transformations of inorganic and organic soil components, including those of anthropogenic origin. In addition, this Professorship is responsible for general soil science teaching at ETHZ.

The person appointed should have had university training in chemistry and advanced research experience in some branch of chemistry. Field experience in soil science is an essential prerequisite for the teaching programme in basic soil science, which has a strong emphasis upon ecological and environmental issues.

The new Professor is expected to collaborate with colleagues in both the Institute for Terrestrial Ecology and in other institutes of ETH Zurich and thus to implement his/her research and teaching program.

Applicants should submit a detailed curriculum vitae, a list of publications, and a short summary of research interests to: **The President of ETH Zurich, Prof. Dr. O. Kübler, ETH Zentrum, Zurich CH-8092 Switzerland** no later than August 31, 1998. *The ETHZ specifically encourages female candidates to apply with a view toward increasing the proportion of female professors.*

Two **POSTDOCTORAL POSITIONS** are available in molecular pharmacology to study the effects of centrally acting drugs on gene expression in the mammalian central nervous system. The first position involves the use of high-density cDNA expression arrays to clone and monitor genes involved in the action of antipsychotic and psychotropic agents. The second position uses functional genomics, gene transfections, and/or behavioral pharmacologic methods to determine the function of novel drug-regulated gene products. Candidates with a strong background in biochemistry/molecular biology, cell biology, or neuroscience are encouraged to apply. Visit our website: <http://www.uku.fi/aitokset/AIVirtanen/eero.htm> for additional information. Send, FAX, or e-mail a curriculum vitae and the names and addresses of three references to: **Dr. Eero Castrén, A. I. Virtanen Institute, University of Kuopio, P.O. Box 1627, Kuopio 70211 Finland. FAX: 358-17-163-030; e-mail: eero.castrén@uku.fi (first position) or: Dr. Esa R. Korpi, Department of Pharmacology and Clinical Pharmacology, University of Turku, Turku FIN-20520 Finland. FAX: 358-2-3337216; e-mail: esa.korpi@utu.fi (second position).**

International Centre for Theoretical Physics, administered by UNESCO, based in Trieste, Italy seeks **TECHNICAL CLERK** to assist Head, Microprocessor Laboratory. Requirements include CAD software tools, organization of courses. Minimum of five years of experience in designing scientific instrumentation, VLSI design, data processing, writing technical documentation, mathematic skills, working knowledge of computer programming. Fluency in English and Italian. Annual net salary LIT 52,187,000 tax-exempt. Fixed-term contract, one-year initial appointment, six-month probationary period, possible indefinite extensions. Further information at website: www.ictp.trieste.it. Applications to: **International Centre for Theoretical Physics, Personnel Office, Vacancy EU/TP/ITA/SC/1029, C.P. 586, Trieste 34100 Italy** before 30 September 1998.

SERVICES

DO YOU WANT TO IMMIGRATE TO THE UNITED STATES?

Our law offices have helped hundreds of foreign researchers successfully obtain legal U.S. residency without a job offer based on their achievements.

We can represent you no matter where you reside. Near-perfect success rate. References available. Assistance with work permits, J-1 waivers, and green cards.

For information visit our website: <http://www.internetimpact.com/kramer> or e-mail our office, e-mail: dmk@ix.netcom.com.

**The Law Offices of David M. Kramer
12121 Wilshire Boulevard, Suite 1201
Los Angeles, CA 90025
Telephone: 310-820-5320
FAX: 310-820-6522**

COURSES

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

The National Institutes of Health has both! For more information, visit our website, which lists an array of clinical and postdoctoral opportunities, including tenure-track positions.

To learn more, search:
<http://www.training.nih.gov>

COMPUTER MARKETPLACE

Primer Design Software

Intuitive degenerate, multiplex, and long PCR primer design for a free demo connect to:
www.PremierBiosoft.com
or call 650-856-2703

PREMIER
Biosoft International
Intuition software for the molecular biologist

Circle No. 25 on Readers' Service Card

QuantiScan for Windows

Scan gels, autoradiographs, TLC plates etc then automatically or manually mark lanes [skewing no problem], fit peaks, subtract background and calculate peak areas or mol. wts. Separate module for blots. \$399
DEMO: call 314-524-8029; email: info@biosoft.com
In Europe: call +44 (0)1223 368622

Circle No. 37 on Readers' Service Card

MARKETPLACE

SCIENCE'S Literature Library

www.sciencemag.org

Click on Electronic Marketplace, then click on Literature Library

Scientific Writing Consultants, Inc.

An English-language editing service for manuscripts and grant applications



Phone/fax: 206-522-4921
E-mail: info@sciwrite.com
Website: <http://www.sciwrite.com>

Circle No. 33 on Readers' Service Card

B&T Cell Isolation

Without effecting cellular function or viability
High purity & recovery • Fast & Easy

GUARANTEED

Call 1 800.367.6227 • Fax 530.888.8925

Miltenyi Biotec Inc.

FREE TRIAL

Circle No. 32 on Readers' Service Card

Botulinus Toxins A-F From Clostridium Botulinum



Wako BioProducts
Wako Chemicals USA, Inc.
1600 Bellwood Road, Richmond, VA 23237
Telephone: (804) 271-7677 Facsimile: (804) 271-7791
(800) 992-9256 bioproducts@wakousa.com

Circle No. 45 on Readers' Service Card

MARKETPLACE

Upgrade your conventional non-IR incubators with the STARLAB CO₂ CONTROLLER

The Starlab CO₂ controller makes it possible for easy daily IR-calibration of incubators with reference gas and rapid CO₂ recovery after door opening during labwork.

<http://huizen.dds.nl/~ghz/starlab.html>

Circle No. 68 on Readers' Service Card

Neuroscience Antibodies

QED

800-929-2114

Circle No. 31 on Readers' Service Card

Automated Sequence Quality Plasmids

6 MINUTE MINIPREPS

all tubes supplied! all reagents ready to use!

MO BIO Labs, Inc.

800-606-6246/760-944-7190/fax 760-944-7134
email: orders@mobio.com / <http://www.mobio.com>

Circle No. 20 on Readers' Service Card

TREVIGEN[®] Apoptosis • DNA Damage Aging • DNA Repair

- Antibodies
- Quantitative Assays
- 96-well Plate Assays

- TACS[™] *In Situ* Assays
- Flow Cytometry
- DNA Repair Enzymes

www.trevigen.com

1-800-673-8443 • Fax: 301-216-2801 • e-mail: info@trevigen.com

Circle No. 46 on Readers' Service Card

Nitrate Analysis?

Try NECi Enzyme Method

- Nitrate Assays for Physiological Samples
- Serum, Plasma, Saliva, Urine, Cell Culture Media
- Accurate Nitrate Analysis using Nitrate Reductase
- Lab Nitrate Test Kits - Test Tube and Micro Plate

Toll Free 1-888-NITRATE (648-7283) NECi Web
The Nitrate Elimination Co., Inc. www.nitrate.com

Circle No. 66 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. 19 on Readers' Service Card

MARKETPLACE

RNA Oligos Our Specialty!

- ▶ Long Oligos - 60 Bases
- 2' OME RNA
- ▶ S-RNA
- Mixed RNA/DNA
- ▶ Fluorescent Labels
- Mods, Special Bases

▶▶▶▶ New RNA Products ◀◀◀◀

RNase X - Decontamination Solution
High Purity Water - Certified RNase, DNA Free

FREE Samples With RNA Oligo Purchase!

Phone: 800-DNA-FAST
Fax: 800-DNA-EASY
Web Site: <http://www.members.aol.com/cybersyn1>

Circle No. 29 on Readers' Service Card

QUALITY CUVETTES!!!

Inexpensive Electroporation Cuvettes
Each sterile package includes a free pipette for easy sample removal!

1-800-289-2465
FAX: 619-597-9594

Circle No. 26 on Readers' Service Card

PRINCETON BIOMOLECULES

PEPTIDES ANTIBODIES

Phone: 614-487-3663 Fax: 614-487-3664
pbcpetide@aol.com www.pbcpetide.com

Circle No. 34 on Readers' Service Card

CLONING & EXPRESSION

Rapid Full Length Cloning of Genes
Guaranteed Gene Expression in Bacteria, Yeast, Insect, and Mammalian Systems
High Purity and Bulk Protein Purification

ExpressGen, Inc.

1-877-CLONING www.expressgen.com

Circle No. 67 on Readers' Service Card

PEPTIDE + ANTIBODIES PACKAGE - \$1200

β-AMYLOID(1-40) \$200/mg

ANASPEC

800-452-5530 (phone) service@anaspec.com
408-452-5059 (fax) www.anaspec.com

Circle No. 2 on Readers' Service Card

ANTIBODY SOLUTION


HYBRIDOMA DEVELOPMENT
POLYCLONAL PRODUCTION
ASCITES SCALE-UP
IMMUNOCHEMISTRY

Babco
BERKELEY ANTIBODY COMPANY

800-922-2226
service@babco.com
www.babco.com

Circle No. 77 on Readers' Service Card

MARKETPLACE

 **MORE PRODUCTS
ON PREVIOUS PAGE**

CUSTOM HYBRIDOMA DEVELOPMENT

- Ascites Production
- Purification • Conjugation
- Polyclonal Antibodies

1-800-481-9737

HTI e-mail: antibodies@htibio.com
http://www.htibio.com
ph: (760) 788-9691
HTI Bio-Products, Inc. fax: (760) 788-9694

Circle No. 14 on Readers' Service Card

ANTIBODIES

For Research & Routine Histology
Inflammation-Endothelial Cells-
Pathological Markers
Custom Monoclonals and Polyclonals
BMA Biomedicals Ltd. (800) 634-3183 (US)
Intl: +41 61 811 6222 / +41 61 811 6006 (fax) info@bma.ch

Circle No. 35 on Readers' Service Card

NEW LOW PRICES **VOLUME DNA SEQUENCING**
CALL (800) 720-GENE

- HIGH-THROUGHPUT GENOME SEQUENCING
- NO ROYALTIES OR LICENSE FEES
- SHOTGUN SEQUENCING EXPERTISE
- LARGE & SMALL PROJECTS ACCEPTED

DNA SEQUENCING **seqwright** (713) 528-4363 PHONE
(713) 528-6232 FAX
www.seqwright.com email: seq@blkbbox.com

Circle No. 8 on Readers' Service Card

Widely Recognized **KlenTaq1** **8¢/u**
Original & Guaranteed Truncated Taq DNA Polymerase
US Pat # 5,436,149 Withstand 99°C
Call: **Ab Peptides** 1-800-383-3362
Fax: 314-968-8988 abpeps@icon-stl.net

Circle No. 3 on Readers' Service Card

DNA	PEPTIDES
Call for prices	\$15.00/residue
Gene Synthesis, Site Mutagenesis, Protein Expression as low as \$500	
Sequencing: \$25 per run	
Custom Anti-peptide Antibody (including peptide synthesis) \$850	
GENEMED SYNTHESIS 800.344.5337 Fax: 650.952.9540 http://www.genemedsyn.com	

Circle No. 12 on Readers' Service Card

MARKETPLACE

Custom Primers - 48 hr turnaround: \$0.69/base
5 ODU - Standard Purity - Ready to Use

ransom hill bioscience, inc.
http://www.ransomhill.com
no setup - no minimum - no baloney!
internet: visla@ix.netcom.com fax: (800) 597-8509

Circle No. 7 on Readers' Service Card

Custom Peptides & Antibodies

Best Service & Price! Compare and Save!

Alpha Diagnostic (800) 786-5777

Fax (210) 561-9544; info@4adi.com

Web site: http://www.4adi.com

Circle No. 17 on Readers' Service Card

CUSTOM DNA SYNTHESIS

PURE & SIMPLE

- Superb Technical Support
- Impeccable Quality
- World's Fastest Service
- Cap Gel & TOF Mass Spec

\$1.19* per base
\$10 setup
50 nmole scale

* Some restrictions apply. Please call for details.

MIDLAND
STILL THE UNDISPUTED #1 CUSTOM DNA SYNTHESIS SERVICE

THE MIDLAND CERTIFIED REAGENT COMPANY
Phone 1-800-247-8766 FAX 915-694-2387
email mrcr@oligos.com

Circle No. 9 on Readers' Service Card

get sequenced!
with Genome Systems' Sequencing Services

As low as \$14/run

- High-throughput Sequencing
- Shotgun Sequencing
- Genomic and cDNA/EST Clone Sequencing
- Custom Sequencing
- Fast & accurate service

GenomeSystemsInc™
Voice: 800.430.0030 or 314.427.3222
FAX: 314.427.3324
email: sequencing@genomesystems.com
World Wide Web: http://www.genomesystems.com

Circle No. 18 on Readers' Service Card

DNA SEQUENCING

Longest reads available
Up to 1000 bp/read
Only \$50 per read
MacConnell Research 800-466-7949

Circle No. 36 on Readers' Service Card

MARKETPLACE

* DNA Sequencing * Synthetic Genes * Protein Expression/Purification * Mutagenesis * Full R&D Contracts

LONG PEPTIDES
50-200 A.A. long peptides. Purified folded and sequence verified!

PRIMERS
NO SET UP FEE
AS LOW AS 50 nmole Full QC Purified by G.F. Guaranteed Quality Order 400 bases or more at the same time

PEPTIDES
NO SET UP FEE
AS LOW AS \$15.00 /residue
Free Mass Spec 10-20 mgs 8-15 residues Shipped in 5-10 days

PLEASE CALL FOR ANTIPEPTIDE ANTIBODIES & MORE

BIO-SYNTHESIS
INCORPORATED
Tel: 1-800-227-0627 Fax: 972-420-0442

Circle No. 10 on Readers' Service Card

DNA SYNTHESIS
• 80¢ per base for 10 OD

DNA SEQUENCING
• As low as \$25 / Run

Retrogen
TEL: 1-800-RETRAGEN • FAX: (619) 455-7987

Circle No. 44 on Readers' Service Card

Smart Move!

Check around, you'll find CBI is the most comprehensive biotech service company in the market today. We provide:

- Protein Sequencing (N- & C- Terminal)
- Automated DNA Sequencing
- DNA/RNA/PNA Synthesis
- Peptide Synthesis
- Amino Acid Analysis
- Calorimetry
- Mass Spectroscopy

Call CBI for special projects, pricing: **1-800-735-9224**

Commonwealth Biotechnologies, Inc.
fax: 804-648-2641 cbi@2020.net www.cbi-biotech.com

Circle No. 6 on Readers' Service Card

Custom DNA
Purified & Delivered in 48 Hours
\$1.20 per base • Purified
http://www.resgen.com
Research Genetics, Inc.
1-800-533-4363

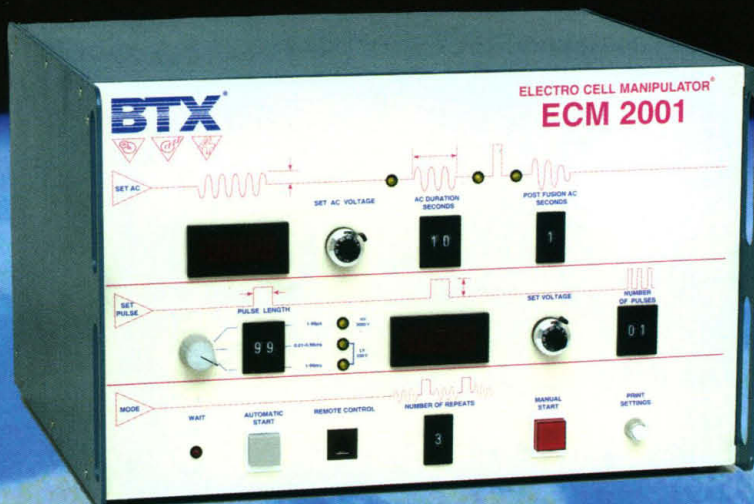
Circle No. 1 on Readers' Service Card

ANIMAL EMBRYO MANIPULATION

IT MAY BE 1998 BUT.....

2001 IS ALREADY HERE

ELECTRO CELL FUSION & ELECTROPORATION IN ONE INSTRUMENT!



APPLICATIONS:

- ▶ Animal Embryo Cloning^{1,2}
- ▶ Hybridoma & Quadroma Formation to Produce Bispecific Antibodies³
- ▶ Fusion of Plant Protoplasts⁴
- ▶ Electroporation of Plant, Mammalian, Bacteria, Yeast and Fungi

Monitor experiments with the Enhancer™ 400



Included with "Super System"
Optional with other systems

Print results immediately



Printer and remote control included
with all ECM® 2001 Systems



ANIMAL EMBRYO CLONING... The "Wave" Of The Future!

- ▶ This genetic technology has tremendous long-term impact for research and commercial applications. The ability to create high numbers of clones gives rise to faster selection and production of genetically superior mammals, as well as potentially reducing the number of replicate animals needed in scientific research. In addition, new applications have been postulated on the ability to conserve native animal breeds and aid in endangered species preservation.

¹BIOLOGY OF REPRODUCTION, vol. 57: 454-459 (1997). "Rhesus Monkeys Produced by Nuclear Transfer"; Li Meng, John J. Ely, Richard L. Stouffer, Don P. Wolf.

²ANALYTICAL BIOCHEMISTRY, vol. 208: 1-9 (1993). "Preparation of Nuclear Transplant Embryos by Electroporation"; Robl, J.M. et al.

³JOURNAL OF IMMUNOLOGICAL METHODS, vol. 187: 1-7, (1995). "A Rapid Non-Selective Method to Generate Quadromas by Microelectrofusion"; Y. Cao, T. Vinayagamoorthy, A.A. Noujaim, M.R. Suresh.

⁴MOLECULAR BIOTECHNOLOGY, vol. 3: 181-189 (1995). "Rapid Optimization of Electroporation Conditions for Plant Cells, Protoplasts, and Pollen"; Saunders J.A. et al

Circle No. 53 on Readers' Service Card

For Additional Info, Call:

1-800-289-2465

Visit our website at:
<http://www.genetronics.com>



Genetronics, Inc.



A Division of Genetronics, Inc.

THE ELECTROPORATION EXPERTS

11199-A Sorrento Valley Road

San Diego, CA 92121-1334 U.S.A.

(619)597-6006 • Fax: (619)597-9594

Distributed In The U.S.A. By:

VWR Scientific Products: 1-800-932-5000

Intermountain Scientific: 1-800-999-2901

Internationally Distributed In:

AUSTRALIA: Tel. 02/9975-7582 BELGIUM, LUXEMBOURG: Tel. 0800 19815 BRAZIL: Tel. 21/592-6642 CANADA: Tel. 800/932-5000 CHINA: Tel. 10/65234385 CZECH REPUBLIC: Tel. 4202 739582 DENMARK: Tel. 45/86 10 10 55 EGYPT: Tel. 02/348-0526 FINLAND: Tel. 3589-584-121 FRANCE: Tel. 01/49-42-20-29 GERMANY, AUSTRIA: Tel. 49/6221-631023 GREECE: Tel. 30/1-5226547 HONG KONG: Tel. 2578-5839 HUNGARY: Tel. 62/476-558 INDIA: Tel. 44/828-3782 ISRAEL: Tel. 03/532-1715 ITALY: Tel. 02/33106630 JAPAN: Tel. 03/3352-2371 or 06/674-2222 KOREA: Tel. 02/538-4441 MALAYSIA: Tel. 03/703-1888 MEXICO: Tel. 05/341-7764 THE NETHERLANDS: Tel. 31/33 495 00 94 NEW ZEALAND: Tel. 04/385-7699 NORWAY: Tel. 47/22715090 PAKISTAN: Tel. 51/517138 POLAND: Tel. 48/71 73 58 13 PORTUGAL: Tel. 34/1 6300379 SINGAPORE, INDONESIA: Tel. 65/273-0898 SLOVAK REPUBLIC: Tel. 42/73707368 SOUTH AFRICA: Tel. 11/789-3932 SPAIN: Tel. 34/1 6300755 SWEDEN: Tel. 0435-230 88 SWITZERLAND: Tel. 41/56 484 80 80 TAIWAN: Tel. 02/880-2913 THAILAND: Tel. 02/308-0611 TURKEY: Tel. 312/231-51-34 UNITED KINGDOM, IRELAND: Tel. 01670 732 992

Immunological Services

Antigen Production and Purification

- Peptide Antigens
- Soluble Protein Antigens
- Cell Tissue Extracts
- Large Scale Mammalian and Insect Cell Culture



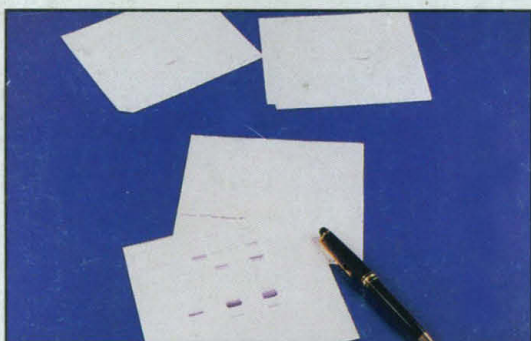
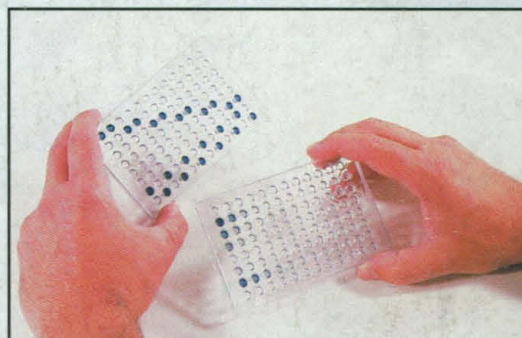
Bioreactor used for large scale production of hybridoma cell lines (Monoclonals).

Assay and Kit Formatting

- ELISA
- Immunofluorescence
- Flow Cytometry
- Immunohistochemistry

Antibody Testing and Characterization

- Immunoprecipitation
- Western Blotting
- ELISA
- Cell and Tissue Staining
- Peptide Mapping



Antibody Production and Purification

- Monoclonal and Polyclonal Development
- Large and Small Scale Monoclonal Production
- Affinity Purification
- Antibody Fragmentation
- Enzyme and Fluorescein Labeling
- Immobilization

Research Genetics

Accelerating Discovery

2130 Memorial Pkwy SW • Huntsville, AL • 35801

U.S. or Canada 800-533-4363

Worldwide 256-533-4363

U.K. 0-800-89-1393

FAX 256-536-9016

<http://www.resgen.com>

Circle No. 54 on Readers' Service Card

Custom Peptides
\$18/residue