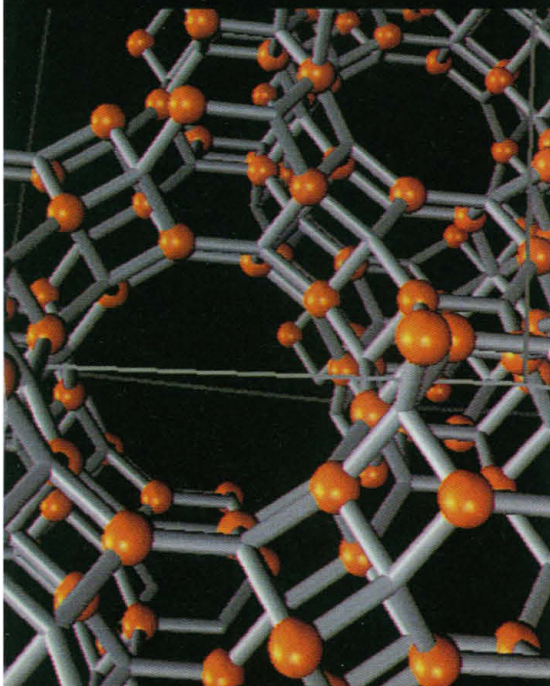


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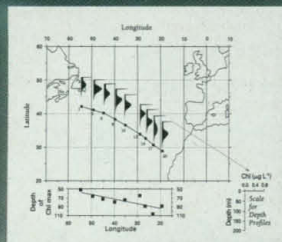
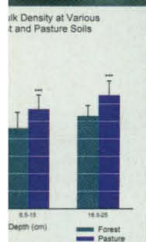
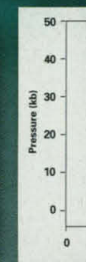
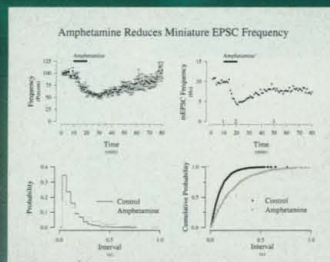
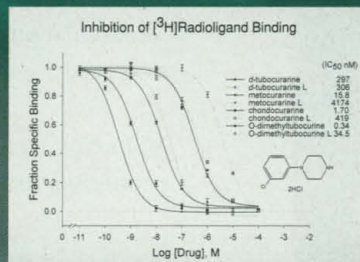
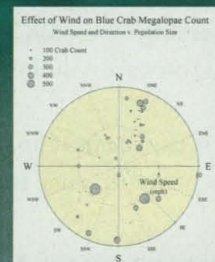
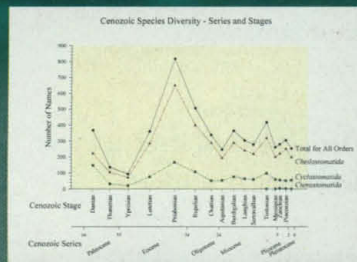
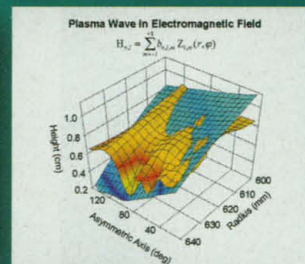
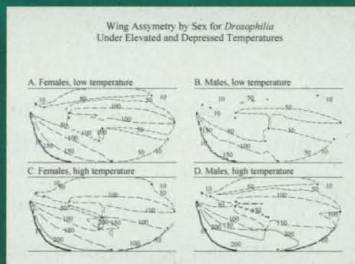
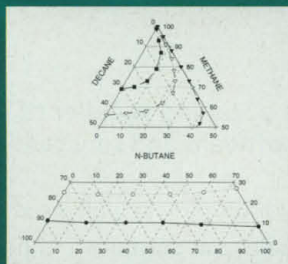
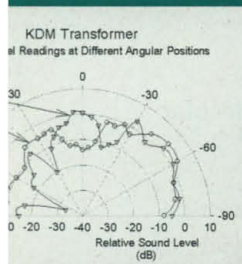
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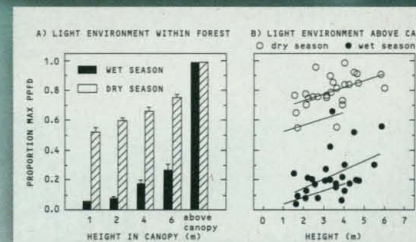
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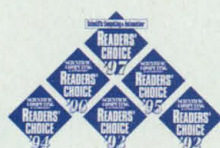
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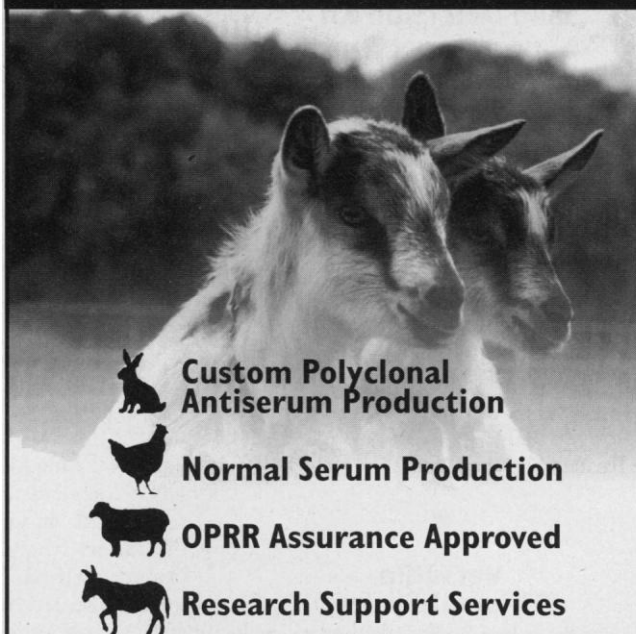
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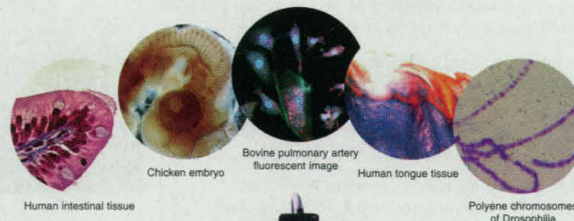
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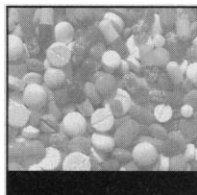
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Focus on Careers **GERMANY**

by Peter Gwynne



Careers in German Biotechnology Companies



Germany had a late start in creating a biotechnology industry, but in recent years it has begun to catch up with other European countries. Government-supported organizations such as the Biolink Information Office

are working hard to encourage foreign companies to participate in the growth, through financial investments or collaborative partnerships with fledgling German companies. Those efforts, combined with natural growth in the domestic biotechnology sector, have created a boom in German biotechnology. The number of companies in the field, already above 300, is increasing rapidly. So is demand for specialists in biotechnology.

Smaller biotechnology companies typically seek scientists with doctoral degrees and broad understanding of molecular biology and biotechnology. The newest companies cast their nets wide, welcoming overseas scientists to their laboratories. Here, we hear from recruiters for Qiagen GmbH and MorphoSys GmbH.

HILDEN, GERMANY: "We hired over 100 people last year," says Michael Kleist, Qiagen's director of human resources. "This year we're looking to hire about 20–25 scientists. Most of our candidates have finished their Master's or Ph.D. degrees, and some have had postdoctoral experience or have worked for other companies."

Founded in 1984, Qiagen has become a leading provider of technologies and products for separating and purifying nucleic acids. It offers more than 250 products based on proprietary technologies, to four main academic and industrial markets: research, genomics, clinical research and diagnostics, and gene therapy and genetic vaccinations.

Out of a present worldwide staff of more than 550, 20 percent work in R&D. That proportion will remain steady as the company grows. "We are just looking for the best in molecular diagnostics and molecular biology from all over the world," says Kleist. He has particular interest in specialist experience in Qiagen's basic technology, which can be applied to existing R&D or fresh enterprises involving nucleic acids. "We're starting up new projects all the time," says Kleist.

Qiagen occasionally collaborates with multinational companies. At present, its researchers are working with counterparts from Swiss pharmaceutical company Roche and American chemical corporation 3M. The company is eager to hire scientists from beyond Germany's borders. "There will be more scientists coming from abroad in the future because of our international markets and our subsidiaries in the U.S., Canada, UK, France, Switzerland, Australia, and Japan," says Kleist. "It may be nice if they speak a little German."



Dr. Joachim Wölle

MUNICH, GERMANY: MorphoSys is a small firm, specializing in contract research in combinatorial biology, that plans to grow larger fast. Founded in 1992 by three scientists, it had expanded to 17 employees two years ago, and now numbers 44. The firm plans to increase that figure to 60 by the end of this year, according to Joachim Wölle, a senior scientist who coordinates MorphoSys' hiring committee for scientists.

"Most of our people have a strong background in molecular biology," says Wölle, "but we're not looking exclusively for people who work in the antibody engineering area. We rely on expertise to develop further scientific programs, and we look for Ph.D's with wide horizons."

The company's own horizons include collaborative agreements with overseas companies. A year ago it signed a research alliance, potentially worth more than \$50 million, with Pharmacia & Upjohn, a multinational pharmaceuticals company soon to be based in New Jersey. The collaboration will apply MorphoSys' human combinatorial antibody library (HuCAL) and its unique Selectively-Infective Phage (SIP) methodology for screening biomolecular libraries to the discovery of compounds with drug potential and characterization of targets for therapeutic intervention.

MorphoSys has already built up an international research team. It has a CEO from New Zealand, a CFO from Switzerland, and scientists from Austria, China, the Philippines, and the United States. "Our goal is to be international," states Wölle. Because of its small size, the company expects its researchers to assume responsibilities beyond their scientific work. "It's a strong entrepreneurial environment, and we try to include team spirit," explains Wölle. His advice to scientists interested in joining the company: "Don't fear risk. Job security is no longer an issue of company size anywhere worldwide! So those who bring high motivation, are reliable, and assume responsibility for what they are doing will always be in high demand." ■



The MorphoSys team is expected to grow by about one third, to roughly 60 employees, by the end of this year.

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

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- structure refinement and optimization of experimental structures

You have a good working knowledge of organic and medicinal chemistry, strong communication skills and enjoy working in a multidisciplinary team. Working experience in a pharmaceutical company's molecular modeling group will be an advantage. Demonstrable expertise and experience in available commercial modeling software packages. (e.g., the TRIPOS or MSI suite of programs) will also be an advantage.

Our Offer:

We offer excellent conditions and the opportunity to work with a young and dynamic team in one of the largest chemical-pharmaceutical companies. You will be based at our Pharma Research Centre in Wuppertal.

Your Application:

If your background and personal experience fits to this profile, please send your complete application (including a C.V., a brief description of research experience, a list of publications, names of referees) and ref.-No. 454 to:

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Personalmarketing
Frau Höller/Frau Fengler
Hauptstraße 119
D-51368 Leverkusen
Germany



Biozentrum of the University of Basel, Switzerland FACULTY POSITIONS IN NEUROSCIENCES

As part of a long-range commitment to Neurobiology the Biozentrum is seeking to recruit four professors in the following areas of research:

Developmental Biology Pharmacology Signal Transduction

Each appointment can be made at the Full Professor, Associate Professor, or Assistant Professor (tenure track) level. Each professorship is endowed with positions and funds for supplies and equipment. Two of the appointments have teaching duties in the Medical Faculty, the other two in the Natural Sciences Faculty.

Applications should include: curriculum vitae, summary of teaching experience and achievements, a brief research plan, a list of publications, and the names and addresses of three referees. These documents should be sent before May 15, 1998, either to the:

Dean of the Medical Faculty, University of Basel
Professor Annetrudi Kress
Spitalstrasse 21
CH-4031 Basel/Switzerland
Tel: +41 61 261 64 39
FAX: +41 61 265 22 30

or

Dean of the Natural Science Faculty, University of Basel
Professor Thomas A. Bickle
Missionsstrasse 64
CH-4055 Basel/Switzerland
Tel: +41 61 267 30 53
FAX: +41 61 267 30 53

The University of Basel specifically encourages female candidates to apply with a view toward increasing the proportion of female professors. Further information is available by e-mail from kuendli@ubaclu.unibas.ch.

The Queen's University of Belfast

Non-Clinical Lectureship in Haematology (Ref: 98/P055A)

School of Clinical Medicine

Applications are invited for this newly created post funded by the Northern Ireland Leukaemia Research Fund to initiate research, provide research support and leadership in Haematology within the Division of Molecular Medicine. Areas of particular interest will include the role of homeobox genes in haematopoiesis and leukaemogenesis. The post holder will be expected to focus on gene regulation, function and expression in this area.

Applicants must have at least a second class Honours degree, or equivalent, in Biochemistry, Biology or closely related discipline; a PhD, or equivalent in Biochemistry, Molecular Biology, Developmental Biology or closely related discipline; proven experience as evidenced by publications in prestigious journals; experience in the study of gene expression and have a wide range of skills in molecular biology. Experience in homeobox gene research, teaching science, evidence of participation in successful grant applications and experience in laboratory supervision would be desirable.

Informal enquiries may be made to Dr AE Irvine by telephoning 240503 (ext 2729).

Salary Scale: Lecturer A £16,045 - £21,016 per annum or
 Grade B £21,894 - £27,985 per annum.

Applicants quoting Ref: 98/P055A may obtain further particulars from the Personnel Office, The Queen's University of Belfast, BT7 1NN (01232) 273246/273044 or Fax (01232) 324944. Closing date: 24 April 1998.

Committed to an Equal Opportunities policy and selection on merit, the University welcomes applications from all sections of the community. Under its affirmative action programme it particularly welcomes applications from women for academic posts.

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When it comes to enhancing quality of life and really making a difference to how people live, global success is not enough. It calls for a company that calls the world its home. More than ever, what's needed are skill and expertise in shouldering responsibility for people and the environment. Which is why research and development are so vital to our work in the field of chemicals and pharmaceuticals.

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EUROPEAN OPPORTUNITIES

THE BLYTHE AND VIOLET EAGLES ENDOWED CHAIR IN FOOD BIOTECHNOLOGY

Faculty of Agricultural Sciences
The University of British Columbia

Applications and nominations are invited for a newly established, endowed chair in Food Biotechnology. This is a unique and exciting opportunity for a senior scientist to shape, lead, and focus a major new thrust in food biotechnology at a major research university. Fundamental and applied research programs in the internationally recognized Biotechnology Laboratory and in several other units across campus provide a rich opportunity for productive collaboration. There are excellent state-of-the-art facilities on campus for a wide range of biotechnological research. The position carries with it designated funding for infrastructure development and technical support. It is expected that the successful candidate will be cross-appointed as an Associate in the Biotechnology Laboratory.

The Chair will be expected to establish and lead a research group applying biotechnological techniques and approaches to develop, modify or improve food products, quality, safety or analysis. He/she will also be expected to teach and to engage in public debate and education on technical and social aspects of food biotechnology.

We are seeking candidates with a recognized and well-funded research program in food biotechnology, an international reputation, and the academic credentials to support appointment at the rank of Professor. Candidates should have a background in the application of modern biotechnology methods to food systems.

Applications, accompanied by a curriculum vitae, names and addresses of three referees, copies of representative publications and a description of current scholarly interests and activities should be sent to the chair of the selection committee: **Dr. J.F. Richards, Professor (Food Science), Faculty of Agriculture Sciences, 6650 N.W. Marine Dr., The University of British Columbia, Vancouver, BC, Canada V6T 1Z4.**



The closing date is **May 31, 1998**. The anticipated starting date is July 1, 1999. Preliminary inquiries are welcomed. **Ph: (604) 822-2162; Fax: (604) 822-3959; E-mail: richards@unixg.ubc.ca** For further information see www.interchg.ubc.ca/agsci and www.biotech.ubc.ca

The University of British Columbia hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

EUROPEAN OPPORTUNITIES

Excellent Opportunities in Bioinformatics and Molecular/Cellular Biology in Germany

GPC is a dynamic drug discovery company based in Munich, Germany. **GPC** uses several automated core technologies for gene expression, protein interaction mapping and functional studies to identify and validate novel targets for drug discovery of innovative drugs. Our large scale approaches generate a high demand for first rate bioinformatics analyses combined with efficient data storage and retrieval systems.

We are looking for dynamic and highly motivated staff, at all levels, for both our bioinformatics group and to work on projects concerned with functional gene analyses.

We reward our team members not only by providing a stimulating and demanding research environment, but also through a stock option program by which everyone can share in **GPC's** success.

For a more detailed company background please visit our web page (<http://www.gpc-ag.com>).



If you are interested in participating in building a premier biotechnology company in Germany's attractive south, then please send an application to the following address:

GPC Aktiengesellschaft
Genome Pharmaceuticals Corporation
Lochamer Str. 29
D-82152 Martinsried/Munich - Germany
Tel.+49 (0)89 89 96 77 0
Fax +49 (0)89 89 96 77 10A

EUROPEAN OPPORTUNITIES

Morphosys

Combinatorial Biology in Drug Discovery

MorphoSys GmbH is a growing biotechnology company located in Munich, which is focused on applying combinatorial biology in drug discovery. MorphoSys operates at the forefront of the design, construction, and screening of biomolecular libraries, and, through its close association with Professor Andreas Plückthun, of the University of Zurich, has particular strengths in antibody engineering. Having developed innovative methods for biomolecule discovery and optimization, MorphoSys is applying these technologies to creating novel therapeutic lead substances, and, within its Functional Genomics Program, to identifying novel targets for therapeutic intervention.

Molecular Biologist, Job code PPA1

As a molecular biologist, you will be creative and goal-oriented. Qualified to PhD level, you will have experience in techniques ranging from cloning and mutagenesis through protein purification. Ideally, you will be familiar with screening of biomolecular libraries on phage. Applications from new graduates are particularly welcome.

Lab Automation Expert, Job code PPA2

As a mechanical engineer or as a scientist with strong interest in technical engineering, you will have 2 or more years of hands-on experience with pipetting robots (Tecan, Biomek) including installation, programming, maintenance and troubleshooting. In close interaction with molecular biologists, you will be responsible for transferring manual procedures to semi-automated or automated systems and solving technical problems with innovative solutions.

Applicants will be looking for a position which combines the environment of the competitive biotech industry with the challenge of cutting-edge science.

MorphoSys has close links to several leading academic institutions, including Max-Planck Institute for Biochemistry in Martinsried, and a policy of encouraging publication in leading journals. The company's location on the outskirts of Munich offers the best possible combination of proximity to one of Europe's most attractive cities, as well as easy access to beautiful countryside. To join our team of highly motivated scientists in the exciting and creative environment of a young biotechnology company, please send your c.v., and arrange for two letters of recommendation to be sent to:

The Personnel Manager, MorphoSys GmbH, Am Klopferspitz 19, 82152 Munich-Martinsried, Germany.

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GENETIC TOXICOLOGY POSITION

We are seeking a Ph.D. level individual with at least 2-3 years experience in Genetic Toxicology to join our expanding program in experimental in vitro and genetic toxicology. This individual will be expected to conduct studies aimed at determining the underlying molecular basis of genotoxicity findings in potential clinical candidate drugs, to develop and implement novel molecular based approaches for mid and high throughput genotoxicity screening to aid in the early drug discovery process, and to broaden our capabilities for GLP testing through the establishment and implementation of supplemental GLP assays (e.g. UDS, SHE, lymphoma) as needed. The qualified candidate must possess strong team skills which will enable productive interactions within the context of our multidisciplinary approach to experimental toxicology. A working knowledge of DNA/Drug interaction, DNA repair, and mutagenesis and molecular methods for their analysis is essential.

(JOB CODE 97-WKB-3358)

RESEARCH INVESTIGATOR - MOLECULAR BIOLOGY

We are seeking a Ph.D. level individual with at least 2-3 years experience in molecular biology/biochemistry to join our new program in Strategic and Exploratory Sciences. This individual will participate as a team member to investigate mechanisms of cell injury, identify molecular toxicology targets, develop assays to detect changes in gene expression and initiation of cell death, and identify or create new technologies for examining toxic and related responses. Demonstrated experience in molecular biological techniques along with a working knowledge of genomics, protein and nucleic acid biochemistry, and strong oral and written communication skills are required. Working knowledge of cell growth and death regulatory pathways a plus.

(JOB CODE 98-IMB-00DH)

RESEARCH INVESTIGATOR - CELL BIOLOGY

We are seeking a Ph.D. level individual with at least 2-3 years experience in cell biology/biochemistry to join our new program in Strategic and Exploratory Sciences. This individual will participate as a team member to investigate mechanisms of cell injury, identify cellular toxicology targets, develop cell-based assays to detect changes in cell function and initiation of cell death, and identify or create new technologies for examining toxic and related responses. This position requires demonstrated experience in cell biological techniques, a working knowledge of hepatocellular and mitochondrial physiology, skills in protein biochemistry along with strong oral and written communication skills. Flow cytometry experience and working knowledge of cell growth/death regulatory pathways are a plus. (JOB CODE 98-ICB-00DI)

SCIENTIST POSITIONS

Several opportunities exist for individuals with a B.S./B.A. or M.S./M.A. degree in Biochemistry, Cell Biology or related fields to join our new program in Strategic and Exploratory Sciences. These individuals will conduct in vivo and in vitro assays, primary cell isolation and culture, protein and nucleic acid biochemistry, preparation of polynucleotide probes, PCR, data collection and analysis including statistics. Skills required include experience in animal handling, cell/tissue culture, biochemistry and molecular biology techniques.

(JOB CODE 98-STP-00DJ)

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Public Announcement Regarding Industrial Science and Technology Research and Development Projects by the New Energy and Industrial Technology Development Organization on April 2, 1998

The New Energy and Industrial Technology Development Organization (NEDO) will launch the following nine research projects in FY 1998 based on funds provided by the Ministry of International Trade and Industry (MITI) of Japan. NEDO would like to invite applications from research organizations interested in participating in the projects. This public announcement regarding the work to be entrusted is based on the condition that the government budget for FY 1998 now under discussion shall be approved.

1. Outline of the Projects and Research and Development Themes to be Entrusted in FY 1998.

<Basic Phase Program>

Research and development projects having themes which are still at the basic research stage.

(1) Genome Informatics Technology Development

1 Intragenomic Sequence Comparison

Specific analysis techniques and measuring apparatus for predicting biological functions from genes by comparing and detecting differences between base sequences will be developed.

2 Predicting Gene Functions Based on Genomic Sequences

A new innovative software system capable of predicting biological functions, etc. of genes by processing information contained in genome base sequences using the informatics technique will be developed.

3 Analysis of Gene Expression Patterns

Specific techniques and apparatus for predicting biological functions by elucidating gene expression patterns will be developed.

4 Analysis of Gene Transcriptional Regulation Information

New specific analysis techniques and measurement apparatus for elucidating the gene transcriptional regulation mechanism will be developed.

(2) The Frontier Carbon Technology Project

Basic technologies required for developing and applying highly functional carbon and related materials with unprecedented electrical and mechanical properties (including corrosion resistance) will be established. Synthesis technology for innovative carbon and related materials with varied properties and materialization technology to facilitate industrial use of these materials will also be developed.

<Application Phase Program>

Research and development projects having themes that are at the application stage.

(3) Nanometer-Scale Optical High Density Disk Storage System

1 Optical Memory Technology using Nanometer Technology

Fabricating technology for high density optical media that is capable of reproducing microscopic pit patterns formed on an optical disk master onto an optical disk will be developed. Signal processing technology for high density optical media that is capable of processing and reproducing information stored in large number of pits contained in one optical beam will be developed.

2 Three-Dimensional Magneto-Optical Memory Technology

By combining magnetic domain high-resolution recording method for high-standard reading of microscopic memory pits and enhancement of magnetic circular polarization for multi-wavelength read-out method for simultaneous reading of multi-layered memory pits, three-dimensional technology for magneto-optical memory technology will be developed.

3 Ultra High Precision Pit Writing Technology

Electron beam lithography technology suitable for pit patterns on optical disk masters and ultra high precision positioning technology for controlling the position of optical disk masters in nanometer precision will be developed.

4 Ultra High Precision Pit Measurement Technology

By improving on current measurement technology such as SEM, STM, LSM, and SNOM, ultra high precision pit measurements technology that is capable of accurately measuring the position and shape of pit patterns in a broad area will be developed.

(4) Human-Friendly and Supportive Robot System

A platform (basic research models) for a human-friendly and supportive robot capable of biped walking and communicating information will be developed. A teleoperation system, a simulator capable of predicting and demonstrating platform movement, and a software system for operating the platform and simulator will also be developed. (FY 1998-FY 1999)

Note: R&D will be carried out in the latter half of the project towards applying the human-friendly robot platform and simulator developed in the first two years of the project. There will be a separate call for public applications for this.



<Academic Institutions Centered Program>

(5) Smart Materials and Structural Systems (Project leader: **Dr. Teruo Kishi**, The University of Tokyo)

1 Health Monitoring System (Place: The University of Tokyo, Sub-leader: **Professor Nobuo Takeda**)

Technology of accurately assessing the type, position, and the extent of a damage inflicted on composite materials and structure will be developed in order to facilitate the development of technology of evaluating structural integrity from the correlation of damage infliction/progression mechanisms and information from sensors and controlling further damages and progression.

2 Smart Manufacturing Technology (Place: Osaka City University, Sub-leader: **Dr. Takehito Fukuda**)

A sensor system that can be used for monitoring formation processes and for health monitoring after formation will be developed. Also, manufacturing technology to facilitate integration of actuators and sensors into a host structure without damaging the structural integrity of the host structure will be developed.

3 Active and Adaptive Structure Technology (Place: University of Nagoya, Sub-leader: **Dr. Yuji Matsuzaki**)

Technology for optimum controlling of lumped/distributed sensors and actuators, etc. that are integrated in a host structure will be developed.

4 Development of Materials and Devices for Actuators (Place: Tohoku University, Sub-leader: **Professor Junji Tani**)

By improving materializing technology of actuator materials such as converting them into thin films, fine wires and making them functionally graded; actuator materials and devices that show stability of response, mechanical strength, and stability under prolonged use will be developed.

(6) Platform for Designing High Functional Materials (Place: University of Nagoya, Project Leader: Professor **Masao Doi**)

This project aims toward the creation and efficient development of novel new materials. New computer simulation technology to facilitate the prediction of polymer material structure and properties will be developed.

(7) Cat-CVD Fabrication Process for Semiconductor Devices (Place: Japan Advanced Institute of Science and Technology, Hokuriku, Project Leader: **Professor Hideki Matsumura**)

Cat-CVD (Catalytic Chemical Vapor Deposition) is a new method of thin film fabrication that employs a decomposition reaction on a heated catalyzer. In order to apply Cat-CVD in basic fabrication processes for semiconductor devices, its mechanism will be analyzed and technology to apply for preparation of insulating thin film in GaAs and ferroelectric integrated circuits, and other devices will be established.

(8) Development of Technologies for Creating New Bioaffinity Molecules using Submicron Beads (Place: Tokyo Institute of Technology, Project Leader: Professor **Hiroshi Handa**)

A technique to analyze the binding form of the chemical-biomolecule complex using submicron affinity beads for selective separation will be established. This will lead to the development of basic technology for creating new innovative materials such as highly sensitive biosensor and chemicals that regulate the function of biomolecule and also for evaluating the effect of chemicals on human body and the environment in creating such new materials.

<Compound Semiconductors for High-Efficiency Electro-Optic Conversion Development Project>

(9) Compound Semiconductors for High-Efficiency Electro-Optic Conversion

In order to create new types of lighting apparatus having a low electric power requirement using high-efficient LEDs that are able to substitute for a fluorescent lamp in terms of energy-light conversion efficiency, a R&D project will be carried out in four phases as follows. The first is an intensive search and elucidation of compound semiconductor materials for light-emitting devices with superior luminescence properties in short wavelengths, and the identification of their luminescence mechanisms. The second is improvement of crystal growth processes in compound semiconductors for the light-emitting devices. The third phase aims at the development of crystal substrates for the light-emitting devices. The last phase is concerned with the development of novel materials that are related to high-brightness fluorescence materials excited by blue and UV LEDs, electrode materials with a low contact resistance, and UV-resistant molding resin materials.

2. Application Procedures

(1) Qualification of Applicants

Research organizations such as companies, research associations, public corporations or universities, interested in participating in a project independently or in the form of partnerships, that meet all of the following qualification criteria may submit an application:

- An applicant must have previous research and development experience in the field or related field of the project. Also, the applicant must have the research and development.
- An applicant must be in sound financial condition and be able to firmly manage its finances and facilities to smoothly carry out the entrusted research and development.
- An applicant must be willing and able to comply with NEDO's instructions, if such are necessary, in order to fully execute all of the provisions of the entrustment contract.
- In the case of a company applying, regardless of whether on an independent or other basis, the company must have a plan about the application and industrialization of the results obtained through the entrusted research and development and also the capability to carry out that plan.

Participation in a project is open to both domestic and overseas research organizations. However, from the viewpoint of ensuring efficiency and flexibility, carrying out research and development at domestic laboratories is one of the important aspects considered. To be specific, regarding overseas research, only research and development items that cannot be conducted in Japan, that are impossible to carry out without using special facilities located overseas, and so on, will be selected.



The criteria that NEDO will follow to select project participants are as follows:

Regarding projects (2) and (4), due to the nature of the research themes, central laboratories should be established in Japan, as a principle. As for the other laboratories, the contents of research and development corresponding to more than one-half of the amount of the total budget (on an annual expenditure basis) for other laboratories should be carried out in Japan.

Regarding projects (1) and (3), the contents of the research and development corresponding to more than three-quarters of the amount of the total budget (on an annual expenditure basis) for each entire project should be carried out in Japan.

Regarding projects (5), (6), (7), and (8), due to the nature of the research themes, central laboratories should be established in universities in Japan.

(2) Application Method

- 1 Please submit proposals in accordance with the Proposal Guideline during the period for application for the research and development project or the research and development theme of your interest.
- 2 You can obtain the following information posted on NEDO's Internet site: (<http://www.nedo.go.jp/index-e.html>)
Basic Plans
Implementation Policies (for the first year)
Proposal Guideline
- 3 Interested parties who cannot access NEDO's Internet site, please attend the below mentioned explanatory meetings. At the meetings, documents concerning application such as the Basic Plans, as well as contract forms (draft), will be made available in written form.
- 4 To obtain the above documents, including contract forms (draft), please send a request together with a self-addressed envelope and international reply stamp to the following address:

**New Energy and Industrial Technology Development Organization
Applied Technology Development Dept.
29th Floor, Sunshine 60 Bldg.
3-1-1, Higashi-Ikebukuro
Toshima-ku, Tokyo 170-6028**

(3) Explanatory Meetings

Explanatory meetings will be held in order for NEDO to fully explain the contents of the entrustment work, procedures concerning contracts, documents to be submitted, etc. We would appreciate the attendance of all interested parties. Please note that Japanese will be the only language used during the meetings.

Date: April 14 (Tuesday), 1998

Place: Kanpo Health Plaza Tokyo (4F)

4-7-7, Higashi-Ikebukuro, Toshima-ku, Tokyo 170-0013

Tel: 03-5952-6881

- | | |
|--|--------------------------|
| (1) Genome Informatics Technology Development | 10:00 a.m. to 11:30 a.m. |
| (2) The Frontier Carbon Technology Project | 12:00 p.m. to 13:30 p.m. |
| (3) Optical High Density Storage System using Nanometer Technology | 14:00 p.m. to 15:30 p.m. |
| (4) Human-Friendly Robot System | 16:00 p.m. to 17:30 p.m. |

Date: April 15 (Wednesday), 1998

Place: World Import Mart, Room 804 (8F)

3-1-8, Higashi-Ikebukuro, Toshima-ku, Tokyo 170-0013

Tel: 03-5954-6214

- | | |
|--|--------------------------|
| (5) Smart Materials and Structural Systems | 10:00 a.m. to 11:00 a.m. |
| (6) Platform for Designing High Functional Materials | 11:30 a.m. to 12:30 a.m. |
| (7) Cat-CVD Fabrication Process for Semiconductor Devices | 1:00 p.m. to 2:00 p.m. |
| (8) Development of Technologies for Creating New Bioaffinity Molecules using Submicron Beads | 2:30 p.m. to 3:30 p.m. |
| (9) Compound Semiconductors for High-Efficiency Electro-Optic Conversion | 4:00 p.m. to 5:00 p.m. |

Questions concerning the research and development and contract for the work to be entrusted will be accepted at the meetings and by fax (only in Japanese) from April 15 to 22, 1998

Fax number: +81-3-3987-9396 (Applied Technology Development Dept.)

3. Period for Application

All applications must arrive at NEDO no later than May 11 (Monday), 1998.

4. Address to Submit Proposals

Please submit proposals to the following address:

**New Energy and Industrial Technology Development Organization
Applied Technology Development Department
29th Floor, Sunshine 60 Bldg.
3-1-1, Higashi-Ikebukuro
Toshima-ku, Tokyo 170**



Associate Scientist/ Staff Scientist

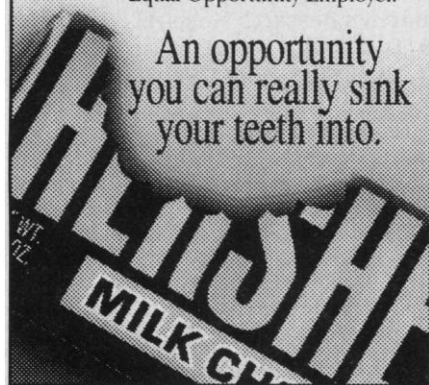
Few names in America have such a desirable reputation as Hershey's Foods Corporation. For over 100 years, our industry leading position has been guided by one simple principle — a commitment to the highest standards of quality. As a result, sales have impressively grown for the past 31 years. Part of this unparalleled success comes from our dedication to the advancement of scientific and technical knowledge.

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What's in a name?

To qualify, you must have a Master's degree in a related field along with 6-10 years of relevant experience. A Ph.D. in Chemistry, Biochemistry or related field along with 4-8 years experience in the food industry is preferred. You should also possess thorough knowledge of the chemistry and physical chemistry of fats and oils, as well as practical experience in physical and thermal analysis of fats and butters. Experience in food processing and formulation also expected. Knowledge of advanced techniques including differential scanning calorimetry and X-ray analysis; lipid synthesis, rearrangement and structural determination; formulating chocolates and coveratures; and in making laboratory prototypes is highly desirable. Strong supervisory, written, oral and presentation skills required. For immediate consideration, please send resume with salary history, to: Attn: SPR, Hershey Foods Corporation, 100 Crystal A Drive, Box 810, Hershey, PA 17033-0810; Fax 717-534-7883. Visit our web site at www.hersheys.com. Equal Opportunity Employer.

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ASSOCIATE SCIENTIST Cardiovascular Research

We seek a talented scientist to join a team focused on the identification and characterization of receptors and related proteins as therapeutic agents. To qualify, you will need a BS degree (MS preferred) in Biological Sciences or a related field combined with appropriate laboratory skills and experience. Background must include experience in cloning, 5' and 3' RACE, PCR and automated DNA sequencing. Experience in oligo nucleotide synthesis, protein purification, cell culture and mammalian gene expression is desirable. To be considered for this position, please respond to Dept. DD98-CK-PC.

ASSOCIATE SCIENTIST Cardiovascular Pharmacology

We seek a highly motivated team player to be responsible for performing *in vivo* experiments in cardiovascular pharmacology/physiology. To qualify, you will need a BS degree in Biology or a related field with at least 4 years of experience or an MS degree and at least 2 years of experience. Background must include experience in *in vivo* techniques in the areas of thrombosis, heart failure and arrhythmias. To be considered for this position, please respond to Dept. DD98-MC-PC.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing the Dept. Code for your position of interest, to: Schering-Plough Research Institute, MS #1250, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



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SENIOR SCIENTIST/PROTEIN BIOCHEMIST

As a member of our Structural Chemistry Department, you will join a multidisciplinary project team and play an integral role in structure-based drug design efforts. Responsibilities will include large-scale production of uniformly or selectively labeled proteins for NMR spectroscopy involving the design and execution of protein production strategies.

To qualify, you will need to be a team player with a PhD in Biochemistry, Biotechnology or a related discipline and 1-6 years of experience in the expression, purification and characterization of labeled recombinant proteins for three-dimensional structure determination using NMR spectroscopy. Background must include experience producing and purifying reagent quantities of proteins using various hosts (bacteria, yeast, filamentous fungus and insect/mammalian cell). Knowledge of state-of-the-art techniques for protein purification as well techniques for optimizing protein expression levels of various systems is essential. Experience with bench top fermenters is a plus. Excellent verbal and written communication skills are a must.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing Dept. SW-SC, to: Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



**Schering-Plough
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**St. Jude Children's
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POSTDOCTORAL FELLOWSHIP

St. Jude Children's Research Hospital, a premier research center for catastrophic diseases of childhood and biomedical research, offers the George J. Mitchell Fellowship in Basic Science Research. The fellowship was established by the American Lebanese Syrian Associated Charities/St. Jude Children's Research Hospital Boards of Governors and Directors in honor of Mr. Mitchell's contributions to the political life of the nation.

The fellowship is open to junior investigators with a M.D., Ph.D., D.V.M., or Pharm.D. degree who seek training experience in one of the specialty areas of laboratory biomedical research available which include: biochemistry, developmental neurobiology, experimental oncology, experimental hematology, hematology/oncology, infectious diseases, genetics, cell and gene therapy, immunology, pharmaceutical sciences, molecular pharmacology, structural biology, tumor cell biology and virology/molecular biology. Please visit our web site at <http://www.stjude.org>.

Fellowship award is made for up to three years and is based on merit, recommendations and promise of a productive career in biomedical research. Stipends are highly competitive.

Applicants should send a complete packet, including a curriculum vitae, a brief description of research interest (please identify specialty area) and three letters of reference to:

Christian C. Patrick, M.D., Ph.D.
Office of Academic Programs-
Mitchell Fellowship
St. Jude Children's Research Hospital
332 N. Lauderdale Street
Memphis, TN 38105-2794 USA

Deadline for receipt of application
is June 1, 1998. Award notification
will be July 1, 1998 with a
beginning date thereafter.

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WYLE LIFE SCIENCES

Wyle Life Sciences (formerly KRUG Life Sciences) Biotechnology Program at the NASA Johnson Space Center invites applicants to fill the position, "Microscopist".

This position is located in the Laboratory of Cellular and Molecular Biophysics at the National Institute of Child Health and Human Development, National Institute of Health in Bethesda, Maryland. The NASA-NIH Center for Three-Dimensional Tissue Culture is seeking a Microscopist for research involving novel technologies for tissue culture, especially the imaging of cells within mounted living tissue blocks. The NASA-NIH Center provides NIH scientists with expertise in tissue culturing and cell imaging. The Microscopist will work closely with other members and users of the NASA-NIH Center, in a multi-disciplinary environment which includes cell biologists, immunologists, virologists, biophysicists, and cell physiologists. Applicants must possess a Master of Science or Ph.D. degree in Cell Biology, Virology, Microbiology, Immunology, or a related background in modern optics, biophysics, biomedical engineering, image processing, and biology as well as experience in and basic knowledge of laser based imaging techniques, particularly scanning confocal microscopy, and standard imaging and related software. The NASA-NIH Center facilities are equipped with wide-field microscopes, scanning confocal microscopes (Leica and Moran), scanning and transmission electron microscopes, and is developing a multi-photon microscope.

This staff position is strongly affected by adherence to previously published cellular and histology procedures, and strict adherence to NIH-CDC and OSHA Lab Standards, and Biosafety Levels I/II and II/III biohazard containment procedures. This position will also require constant review of the literature, developing new technologies such as imaging mounted blocks of viable tissue, and analysis of unique data. Standard techniques must be combined with the newly developed methods, and critical interpretation of data is mandatory.

Please Respond By Indicating Position: BIOCEL-9801

Qualified applicants should send a scannable resume to Wyle Life Sciences, 1290 Hercules Drive, Suite 120, Houston, TX 77058 or fax (281)212-1211. EOE M/F/H/V, Smoke-free workplace.

Postdoctoral Positions

Joslin Diabetes Center/
Harvard Medical School

IMMUNOLOGY

Positions are available to study the immunological defects underlying the pathogenesis of autoimmune diabetes using transgenic/knockout mouse approaches. Candidates holding a Ph.D. or MD degree with experience in cellular immunology, molecular biology or genetics will be considered. Please send CV, a summary of research interests, and names of three references to the attention of

Dr. Myra A. Lipes, Research Division,
Joslin Diabetes Center, One Joslin Place,
Boston, MA 02215; Fax: 617-732-2497;
Email: lipesm@joslab.harvard.edu

VASCULAR BIOLOGY

Applications are invited for a postdoctoral position in signal transduction and gene expression related to the cardiovascular complications of diabetes. Candidates should have a Ph.D. in biochemistry or molecular biology with 0-3 years of postdoctoral experience. Please send CV and the names, addresses and telephone numbers of three references to the attention of

Dr. Edward P. Feener, Section on Vascular
Biology, Joslin Diabetes Center,
One Joslin Place, Boston, MA 02215
Email: FeenerE@joslab.harvard.edu
Fax: 617-732-2637



**Joslin
Diabetes Center**

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Animal Science
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Molecular Biology
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...and many others

Visit the ARS Vacancy Web Site

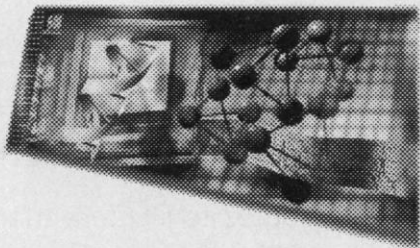
for position descriptions and application procedures

www.ars.usda.gov/afm/hrd/resjobs

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At Schering-Plough Research Institute in Kenilworth, NJ, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on studies in immunology.

POSTDOCTORAL FELLOW Immunology

We seek a talented researcher with a strong background in immunology to play a key role in a team-oriented therapeutic discovery program. This is a fully-funded postdoctoral position providing an outstanding opportunity to be a part of a state-of-the-art research department involved in studying chemokine biology using transgenic and knock-out approaches. Areas of concentration include: development of conditional genetic systems to study chemokines and their receptors, and development of new genetic models of inflammation.

To qualify, you will need a PhD in Molecular Biology, Immunology or a related field and experience with mouse genetics and *in vivo* biology. Strong organizational, interpersonal and communication skills are essential.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing Dept. DMS/SL/PD, to: Schering-Plough Research Institute, Human Resources, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



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GENOMICS – SENIOR SCIENTIST

Positional cloning and Pharmacogenetics

We are seeking an energetic scientist with a strong background in human genetics who will be a key member of our collaborative CNS genetics project team. Responsibilities will include review of linkage data, candidate gene selection and evaluation, and the coordination of collaborative projects within our multidisciplinary group. In addition, you will help Parke-Davis implement its pharmacogenetics program, focusing on the selection of more optimal targets for drug discovery. Candidates should have a Ph.D. in Molecular Biology or Genetics and 3 + years' post-doctoral experience. Experience in genotyping and linkage analysis is required. Excellent communication and organizational skills are a must. Job Code: CJM-98083

SENIOR SCIENTIST

Proteomics

Our proteomics group is seeking a scientist to coordinate and carry out proteomic studies of mammalian systems. A strong background in mammalian physiology, cell biology, metabolic pathways and signal transduction is required. Studies chosen for proteomics will support the development of drug therapies in numerous preclinical areas. Candidates should have a Ph.D. with four or more years of experience in the areas of mammalian physiology, biochemistry and signal transduction. Experience running two-dimensional polyacrylamide gel electrophoresis and computer assisted image analysis systems preferred but not essential. Experience with cell fractional methods is highly desirable. Job Code: CJM-98053

We offer an attractive compensation package and a positive environment that encourages continuous growth and success. Qualified candidates mail, fax or e-mail a resume*, indicating the Job Code of interest, to: **Parke-Davis Pharmaceutical Research, Human Resources Department, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (734)622-3394. E-mail: resume@aa.wl.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
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- Med Ad News September 1997



PARKE-DAVIS

**MEDICAL UNIVERSITY OF SOUTH CAROLINA
DIRECTOR
CENTER FOR THE STUDY OF AGING**

The Medical University of South Carolina invites nominations and applications for the position of Director, Center for the Study of Aging. The Center's mission is to improve understanding of the aging process and the health status of older people through interdisciplinary research, clinical services, and educational programs. This person will develop interdisciplinary research in; 1) developmental biology of aging; 2) health systems and outcomes research; 3) cultural and intergenerational issues; and 4) cognitive disorders. In keeping with the mission, the Center will endeavor to build linkages among disciplines with the goal of advancing cutting-edge science, improving the health care system and improving the lives of older people.

The Medical University of South Carolina is located in Charleston, SC which is a rapidly growing coastal retirement area. It is the state's largest medical complex and is comprised of the University Medical Center and six academic colleges: Dental Medicine, Graduate Studies, Health Professions, Medicine, Nursing, and Pharmacy. In addition, the campus is home to interdisciplinary centers (e.g. the Hollings Cancer Center, Gazes Cardiac Center and Thurmond Center for Biomedical Research, and the Center for Health Care Research). In addition, the Ralph H. Johnson VA Medical Center offers programs in gerontology. The campus occupies over 50 acres and 65 buildings. The Medical University of South Carolina has a \$750 million dollar operating budget including almost \$80 million in research. The University employs over 8,000 persons, including almost 1,000 faculty members and 800 housestaff and 2,300 students.

The Director of the Center for the Study of Aging will have administrative responsibilities for overall management, resource allocation, personnel, and program development and implementation. The Director reports to the Vice President for Academic Affairs/Provost.

Applicants should possess a M.D. or Ph.D. degree, experience in academic administration and leadership, and a record of scholarly achievement sufficient to qualify for a tenured rank of professor within the University. Interested individuals should submit a letter of application, curriculum vitae and names of three references to: David Bachman, M.D., Chair, Center for the Study of Aging Search Committee, c/o Beverly Carson, 601 Clinical Science Building, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

The Medical University of South Carolina is an equal opportunity/affirmative action employer



**UNIVERSITY OF PENNSYLVANIA
PROKARYOTIC MOLECULAR
BIOLOGY/PATHOGENESIS**

The Department of Microbiology, University of Pennsylvania School of Medicine invites applications for tenure-track professorships at all ranks. Candidates should have strong credentials in the fields of microbial pathogenesis or prokaryotic molecular genetics. Major responsibilities will include supervision of an active research program and teaching microbiology to graduate and medical students. Applicants should submit a curriculum vitae, summary of research accomplishments, description of future plans and three letters of reference by June 1, 1998 to:



**Dr. Yvonne Paterson, Chair
Prokaryotic Search Committee
Department of Microbiology
University of Pennsylvania
225 Johnson Pavilion
3610 Hamilton Walk
Philadelphia, PA 19104-6076**

or e-mail applications to yvonne@mail.med.upenn.edu

Visit our Website: www.med.upenn.edu/micro/

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As the world's leading life sciences company, Novartis has become the natural habitat of some of the world's brightest scientific professionals. Located in the heart of North Carolina's Research Triangle Park, our diverse scientific teams have access to a wealth of resources, enabling them to apply tomorrow's technology toward addressing today's critical research issues.

**RESEARCH SCIENTIST
Position No. 737**

The successful candidate will establish non-tissue culture innovative approaches to transform essential crops. Previous experience in plant transformation techniques is required. Experience in plant tissue culture, microbiology, and molecular biology are desirable. The position will have laboratory activities. A PhD. and 2+ years of post-graduate experience in transformation/tissue culture or related biological science is required.

Novartis offers a competitive salary commensurate with qualifications and experience, and a comprehensive benefits package. Qualified candidates should forward a resume and cover letter (indicating position number) and a list of three (3) references to: Novartis, Human Resources, PO Box 12257, Research Triangle Park, NC 27709-2257. Closing date: April 30, 1998. We are an equal opportunity employer.



OPPORTUNITIES IN AIDS RESEARCH: HUMAN IMMUNOLOGY

The National Institutes of Health announces a new NIH Grant Program sponsored by the Office of AIDS Research; National Institute of Allergy and Infectious Diseases; National Cancer Institute; National Institute of Child Health and Human Development; National Heart, Lung, and Blood Institute; National Institute on Aging; and National Institute of Diabetes and Digestive and Kidney Diseases.

The program emphasizes supporting human immunology research projects that are particularly innovative, novel, and high risk/high impact and those that show clear promise for advancing the basic understanding of the development and functioning of the immune system. This understanding is needed to more rationally approach immune reconstitution in HIV-infected subjects during infection and in the period after introduction of effective antiviral therapy. Applications are especially welcome from new investigators and those not currently active in research on AIDS.

The estimated total funds (direct and indirect) available for the first year of support for this program will be \$6 million. Applicants may request up to two years of support and up to \$150,000 per annum in direct costs. Awards will be made by October 1, 1998. This program utilizes a grant mechanism (R21) that provides funds to projects of an exploratory nature to generate preliminary data for further studies.



For further information visit

www.nih.gov/grants/guide/pa-files/PAS-98-040.html

or request information by phone at 301-496-3677

Medicine At The Core Of Life

Gilead Sciences 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 Clinical Virology

This position challenges the scientist to investigate the mechanisms of HIV drug resistance at the molecular and cellular levels. Working as part of a scientific team, you will support the clinical development of Gilead's antiviral compounds, including the interpretation and presentation of virology data at scientific meetings and for publications. Requires a PhD and 2+ years postdoctoral experience, with demonstrated molecular biology and tissue culture knowledge, and specific virology skills. Familiarity with protein expression and purification techniques and experience working with viral and mammalian enzymes are also desired.

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 #SCI-045, Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404, fax (650) 573-4800. Visit our Web site: www.gilead.com to learn more about our current opportunities. We are proud to be an equal opportunity employer.

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Wayne State University

FACULTY POSITIONS: DEVELOPMENTAL BIOLOGY

ASSISTANT, ASSOCIATE, AND FULL PROFESSORS—Wayne State University is expanding its research and training programs campuswide in developmental biology, through the efforts of the College of Science, the School of Medicine, and the Barbara Ann Karmanos Cancer Institute. Positions are available on both the tenure track and University-funded research track. Candidates should be established independent investigators or show promise of being able to launch a competitive extramurally funded research program. Excellent research laboratories and support facilities are available as well as generous start-up packages.

Applicants should send a complete curriculum vitae, a brief description of current and future research (3 pages), and recommendations from at least three references to:

Joint Search Committee in Developmental Biology
c/o Dr. Jack Lilien
Wayne State University
5047 Gullen Mall
Detroit, MI 48202-3917
e-mail: dauphina@kci.wayne.edu
<http://sun2.science.wayne.edu/~devbio>

*Wayne State University School of Medicine, the country's
largest single-campus medical school,
is an Equal Opportunity/Affirmative Action Employer.*

**DEPUTY DIRECTOR
FOR RESEARCH
National Center for Toxicological
Research (NCTR)
DHHS/Food and Drug
Administration (FDA)
Jefferson, Arkansas**

NCTR, located 35 miles south of Little Rock, Arkansas, is a research center of the FDA, DHHS. The mission of NCTR is to conduct peer-reviewed scientific research that supports and anticipates FDA's current and future regulatory needs.

This involves fundamental and applied research specifically designed to define biological mechanisms of action underlying the toxicity of products regulated by the FDA. This research is aimed at understanding critical biological events in the expression of toxicity and developing methods to improve assessment of human exposure, susceptibility, and risk.

NCTR conducts collaborative research with other parts of the FDA, other government agencies, academia, and industry. These interactions enhance opportunities to provide more effective and realistic measures of health-related risks associated with FDA-regulated products.

The Deputy Director for Research is a senior management official responsible for directing all of the scientific programs of NCTR and contributing fully in all aspects of Center management. The Deputy Director formulates overall science direction for the Center's research programs and cultivates and manages the human, physical, and fiscal resources to accomplish research objectives. The NCTR research staff includes approximately 90 doctoral investigators and 60 support personnel. On-site animal care and pathology are conducted with 150 contract employees.

NCTR is a multicultural, multinational work environment. As director of research, the incumbent is responsible for maintaining and promoting an atmosphere of mutual acceptance and cooperation among a diverse work group.

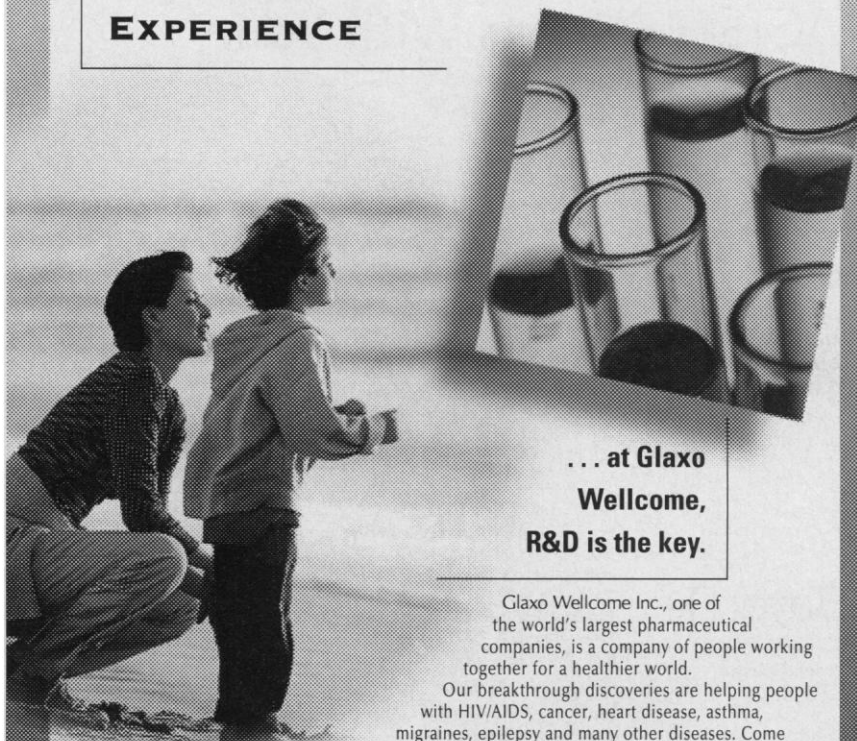
This is an excepted civil service managerial position in the Senior Biomedical Research Service with a starting salary range of \$125,000 to \$135,000. This position requires a doctoral-level degree in biomedicine or a related field including behavioral science and epidemiology/biostatistics. Individuals must be actively engaged in peer-reviewed original biomedical research and considered by their peers to be outstanding. A strong scientific background in toxicology/biology and managerial experience in a scientific environment is desired. Relocation expenses will be paid in accordance with FDA policy.

To express your interest in this position, please call **Mary Ann Hutchison (870-543-7505)** for a complete copy of the vacancy announcement or write to:

**FDA/NCTR Personnel Office
Attn: Mary Ann Hutchison
3900 NCTR Road
Jefferson, AR 72079-9502**

Applications must be postmarked no later than May 31, 1998. *FDA is an Equal Opportunity Employer.* FDA/NCTR is a smoke-free environment.

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**RESEARCH SCIENTIST/SR. SCIENTIST
Molecular Endocrinology**

We seek a Research/Senior Scientist to be responsible for carrying out the processes involved with ion channel functional analysis or high throughput screen development. Individual will use electrophysiological techniques to profile molecules that will work through ion channel signaling pathways or develop novel ion channel functional assays.

This position requires a BS, MS or Ph.D. in Physiology, Biochemistry or Biophysics with 2-4 years relevant experience. Experience with either patch clamp analysis of ion channels or in the design and implementation of novel high throughput assays is required. Familiarity with molecular biology techniques or fluorescence is desired; knowledge of smooth muscle physiology or pharmacology is a plus. Candidate must have excellent oral/written communication skills with the ability to work effectively with a multidisciplinary team of scientists. Level of position will be based upon qualifications and skill level. Refer to Job #ASC4884-1 on all resumes.

**ASSOCIATE SCIENTIST/SCIENTIST
Combinatorial Chemistry**

While working with the Analytical Chemistry staff and Medicinal Chemist customers, the selected individual will be responsible for analyzing samples and solving combinatorial chemistry problems in support of drug discovery. Duties will include analyzing samples by mass spectrometry (including high resolution MS) and gas or liquid chromatography-mass spectrometry. Will also maintain open access instruments including MS, LC-MS, and GC-MS.

This position requires a BS in Chemistry with a minimum of 2 years relevant experience in mass spectrometric processes. Excellent troubleshooting and communication skills are required, as is the ability to work well in a team-oriented environment. Refer to Job #ASC4767-1 on all resumes.

In exchange for your considerable skills, we offer highly competitive salaries, generous benefits and the excitement of working in Research Triangle Park, NC, the world's largest planned research center. This excellent location offers a vast array of cultural, recreational and educational opportunities. For confidential consideration, send your resume, which must include position title/job# and salary history to: Employment Services/R&D, Glaxo Wellcome Inc., 5 Moore Drive, Bldg. #5, Room 2520, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/D/V. To inquire about other openings, visit our website at www.glaxowellcome.com or call our JobLine (919) 483-2565.

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Division**

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Research activities are expanding at our 43-acre Berkeley, CA-based Biotechnology Unit, which is responsible for the global research, development and production of biotechnology-derived products. Our research and development program includes activities in new therapeutic protein gene discovery, protein engineering and gene therapy. Additionally, our Pharmaceutical Division has worldwide responsibility for the research and development of treatments for cancer, diabetes, osteoporosis and obesity.

We currently seek qualified, highly-motivated Scientists to join our team-oriented, interdisciplinary research environment in the following area:

RESEARCH ASSOCIATES, PROTEIN ENGINEERING

Two positions are available for individuals with experience in state-of-the-art molecular biology or biochemistry. Requires BS in Biological Science and 2+ years of relevant experience. Demonstrated knowledge in one or more of the following techniques: site-directed mutagenesis, study of protein-protein interactions, vector construction and expression, and protein and DNA purification is essential. Recombinant skills such as phage display experience would be a definite plus.

These positions require exceptional communication skills and the ability to work in a team environment.

Bayer offers an attractive compensation package...and there's one more fact. If you're ready to join us, there's no better time than now. For immediate consideration, please forward your resume, WHICH MUST INCLUDE JOB CODE, to: **HA043, Human Resources, Bayer Corporation, Pharmaceutical Division, P.O. Box 1986, Berkeley, CA 94701.** No agencies or phone calls please. For more information on Bayer, search: <http://www.careersearch.com/cm/bayer/>

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Bayer Corp. is committed to enhancing and maintaining cultural diversity within our work environment.

POSTDOCTORAL FELLOW/SCIENTIST POSITION IN CANCER MOLECULAR GENETIC EPIDEMIOLOGY

A position is available in an NIH-funded research program aimed at identifying interactions between the environment and genetic variation (both inherited and acquired by mutation) involved in oral cancer. The incumbent will be responsible for DNA extraction from tumor and other tissues, the development and use of appropriate molecular assays, such as loss of heterozygosity and mutation screening. Additional responsibilities will include standard quality control of all activities, inventory management of tissue specimens, documentation of laboratory procedures and results, and the writing of progress reports. Candidates should have a Doctorate in a relevant discipline, such as human genetics or cancer biology, or a Master's degree in such an area with 2-3 years of relevant experience. A curriculum vitae and the names of three references should be sent in confidence to **GEO-CENTERS, INC., 1801 Rockville Pike, Suite 405, Rockville, MD 20852, Attn: Code 4008.**

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GEO-CENTERS, INC.

Postdoctoral Positions

Training in Drug and Carcinogen-DNA Interactions

The Purdue Cancer Center has several openings for Postdoctoral scientists with interests in the molecular biology of cancer or nucleic acid biochemistry on its National Institutes of Health training grant entitled "Training in Drug and Carcinogen-DNA Interactions". These positions may be filled only by US Citizens or Permanent Residents. A list of faculty and their research interests are shown below:

John N. Anderson, Ph.D. - DNA bending and replacement; DNA structure and nucleosome positioning

Peter T. Gilham, Ph.D. - Development of new anticancer and anti-Aids agents; studies on chemically-modified nucleic acids

Curtis L. Ashendel, Ph.D. - Molecular events in cell signaling that involve serine/threonine protein kinases

Marietta L. Harrison, Ph.D. - Protein tyrosine kinase function; the nonreceptor protein-tyrosine kinases, Lck and Csk

Donald E. Bergstrom, Ph.D. - Nucleic acid chemistry; modified nucleosides as tools for molecular biology

Stephen F. Konieczny, Ph.D. - Transcriptional gene regulation in eukaryotic cells; muscle development; growth factors and oncogenes

Richard F. Borch, M.D., Ph.D. - Design and synthesis of novel anticancer drugs

Harry A. Morrison, Ph.D. - Cutaneous photobiology and potential photoactivated antitumor drugs

Stephen R. Byrn, Ph.D. - Development of antitumor drugs

Elizabeth J. Taparowsky, Ph.D. - Ras signaling; transcription regulation by the Myc/Max protein complex

Ching-je Chang, Ph.D. - Design and synthesis of signal transduction inhibitors

H. Lee Weith, Ph.D. - Biophysical chemistry of nucleic acids, computational biochemistry

R. Graham Cooks, Ph.D. - Detection of chemical carcinogens through their interactions with nucleic acid components

Mark S. Cushman, Ph.D. - Design and synthesis of potential anti-AIDS, anticancer and antibiotic agents

Robert L. Geahlen, Ph.D. - Protein-tyrosine kinases



Please send curriculum vitae and names of three references to the faculty member(s) of interest, c/o Purdue Cancer Center, Hansen Life Sciences Research Building, Purdue University, West Lafayette, IN 47907. An Equal Opportunity/Affirmative Action Employer.

Open Doors

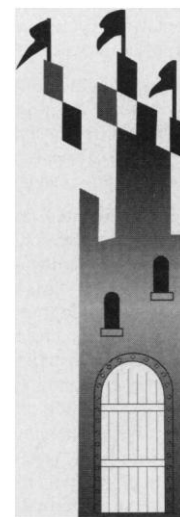
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**St. Jude Children's
Research Hospital**

ALSAC • Danny Thomas, Founder

POSTDOCTORAL POSITION IN DEVELOPMENTAL AND MOLECULAR BIOLOGY

A postdoctoral position is available for investigating the molecular genetic control of the murine homeobox gene *Six3* during vertebrate eye development. Interested individuals with a strong background in molecular biology or mouse embryology should send their CV and the names of three references to:

Dr. Guillermo Oliver
Department of Genetics
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105
USA

www.stjude.org

Transitional Researcher in Addiction

The **Albert Einstein College of Medicine** seeks an outstanding researcher in **clinical and translational research relating to the neurobiology of drug addiction**.

The candidate is expected to translate basic neurobiological research findings into human laboratory studies and clinical trials. The candidate will have an established record of accomplishment in human laboratory studies and clinical research relating to the neurobiology of drug addiction, and is expected to generate external grant support. The successful candidate will be offered an attractive recruitment and start-up package, excellent laboratory facilities and appropriate faculty rank. Send your Curriculum Vitae to:

T. Byram Karasu, M.D.
Silverman Professor and Chairman
Department of Psychiatry
Albert Einstein College of Medicine
Jack and Pearl Resnick Campus
1300 Morris Park Avenue
Bronx, NY 10461. EOE.

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CHIROSCIENCE

Chiroscience R&D, Inc. (formerly DARWIN MOLECULAR CORP.) is a U.S. branch of Chiroscience Group Plc., an emerging pharmaceutical company with facilities in Seattle, Washington and Cambridge, UK. Our research is aimed at the discovery and development of innovative, small-molecule drugs, with a therapeutic focus on autoimmune disease, cancer, inflammation, pain, and osteoporosis. Chiroscience research groups span the drug discovery process from genomics, informatics, biology, combinatorial chemistry, and medicinal chemistry to drug development. We are searching for motivated, highly qualified individuals to fill key research positions at our Seattle site in a number of areas:

SYNTHETIC ORGANIC CHEMISTRY

We are seeking 3 Scientists to join our innovative drug discovery team. These positions require a Ph.D. in chemistry with 0–5 years of postgraduate experience in synthetic organic chemistry. Industrial experience is a plus. Candidates must have the ability to plan and execute multistep synthetic transformations as needed for preparation of target compounds and facility with chromatography (flash, TLC, HPLC) and spectroscopic analysis (NMR, MS). Specific experience in combinatorial chemistry and/or a working knowledge of medicinal chemistry is preferred. **Job Code: S4398-1**

GENOMICS

This Scientist will join a group focused on the application of genetics and positional cloning to the identification of novel drug targets. Will be responsible for cloning relevant genes; will propose new projects, evaluate their feasibility and relevance to drug discovery, map and clone the genes. Requires a Ph.D. and 3 years postdoctoral experience (or the equivalent) and a strong background in genetics and molecular biology. Experience in model organism genetics (esp. the design of genetic screens), human genetics, biochemistry, epidemiology, statistics, or positional cloning is desirable; computer literacy and the ability to thrive in a team-oriented environment is required. **Job Code: S4398-2**

MOLECULAR BIOLOGY

This Scientist will use molecular biology tools to contribute to the characterization of novel gene function and the suitability of the gene candidate as a drug target. This position requires a Ph.D., a strong background in molecular biology with experience in protein expression and biochemistry. Previous experience with phage display and/or single-chain antibody construction is a plus. **Job Code: S4398-3**

IMMUNOLOGY

This Scientist will be responsible for the initiation and characterization of various rodent models to be used for in-house gene discovery programs and for the analysis of novel gene function. The successful candidate will implement established models of immunological disease or pathology. In addition, this individual will be responsible for the identification, establishment, and validation of novel disease models. This position requires a Ph.D. and a strong background in immunology or a related field. **Job Code: S4398-4**

INFORMATICS

This Bioinformatics Analyst will perform computational analysis of information coming out of gene discovery projects, including database searches, sequence analysis, and genotyping analysis, as a member of multiple research project teams. This individual will also develop requirements for informatics tools, work with developers to implement those tools, and apply the tools to complex analysis problems. This position requires a B.A. or B.S. in biological science and a minimum of 3 years experience. Good teamwork and time management skills are essential. Familiarity with UNIX and sequence analysis software such as GAP and BLAST is required. **Job Code: S4398-5**

INFORMATICS

Our Systems Analyst will work closely with users in both Seattle and the UK to extend our compound registration system and provide in-house management and assistance for our upgrades to the third-party software that maintains and accesses chemical and screening data. Other duties to include: support of MDL software on Windows NT, Macintosh, and IRIX, including ISIS, Screen, ACD, Project Library, ChemScape Chime Pro and ChemScape Server. A B.S. or B.A. in Computer Science and 5 years experience is required for this position, as well as experience with MDL products, including ISIS and Screen, and with Windows NT, UNIX, and Macintosh. Additional requirements include experience with JavaScript (client and server), HTML, Perl, and SQL in an Oracle environment. A background in the biological sciences and familiarity with programming concepts is preferred. **Job Code: S4398-6**

Chiroscience R&D's team-oriented environment encompasses a wide range of scientific disciplines and is ideal for highly motivated and innovative employees. We are located in a scenic community just north of Seattle. We offer employees competitive salaries, excellent benefits, and a stock option program. To apply, please send your CV & cover letter to: **Chiroscience R&D Inc., Job Code, 1631 220th St. S.E., Bothell, WA 98021. We are an Equal Opportunity Employer.**

SCIENTIST, MOLECULAR BIOLOGY

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has a challenging opportunity for a Scientist at the PhD level (or equivalent) with molecular genetic expertise to join the staff of our DNA microarray group within the department of Molecular Biology. The selected candidate will be responsible for conducting studies in gene expression analysis, gene activation, disease profiling, target identification and target validation in a wide range of both animal and microbial systems. In particular, this individual will be responsible for introducing improvements to our microarray and other high-throughput expression analysis platforms.

This critical position will involve work on the preparation of microarrays on various surfaces, RNA purification, probe generation, hybridizations and data analysis. Other responsibilities will include microarray technology development and providing expert advice to scientific collaborators throughout the Research and Development organization. Responsibilities may also include managing a laboratory and supervising one or more laboratory scientists.

Qualified candidates will possess a PhD in Molecular Biology, Biology, Biochemistry or Chemistry and a minimum of two years of post doctoral experience. Experience with DNA arrays, fluorescent labeling, hybridization kinetics and robotics is strongly preferred. A solid background in relevant computer technologies with some computer programming skills is most beneficial. Excellent oral communication skills are essential since the selected candidate will be required to present data to internal and external groups.

Located in a state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package as well as a stimulating work environment in which to grow and excel. For confidential consideration, please send resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code H80075, P.O. Box 2645, Bala Cynwyd, PA 19004. **Indicating Job Code is essential.** For more information on SmithKline Beecham, visit our Web site at www.sb.com/careers. We are an Equal Opportunity Employer, M/F/D/V.



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NEUROBIOLOGISTS

Pharmacia & Upjohn is among the world's largest pharmaceutical companies. We are involved in areas such as Oncology, Infectious, Metabolic, and Central Nervous System diseases to help people live longer and fuller lives. The Neurobiology Unit of Pharmacia & Upjohn is seeking candidates with experience and significant expertise in Molecular Neuropharmacology, Neuroanatomy, Neurogenomics, CNS Electrophysiology, and CNS Pharmacology. The positions require a Ph.D.

Successful candidates will lead their own laboratories and will work in fully integrated research teams seeking novel therapies for Alzheimer's disease, Parkinson's disease, migraine, schizophrenia, anxiety, and depression. Strong communication and problem-solving skills plus integrity, perseverance, good judgment, and a drive for results are essential. Successful candidates will show individual initiative while working in a

team-based drug discovery effort. We are also seeking experienced individuals at the B.S. or M.S. level for work on the above projects.

We provide career opportunities for individuals who want to make a difference in their jobs and for the millions of people who rely on our products worldwide. If you're one of them, contact us. Competitive salary and benefits packages available. For confidential consideration, please send your C.V. to: **Pharmacia & Upjohn, Ad #980009, Recruiting, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001.** Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.



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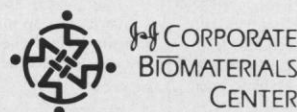
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You will work with our materials synthesis, characterization, and processing groups to design, fabricate, and test novel medical device prototypes. Knowledge of polymer synthesis, characterization, or processing is required. You will also be responsible for establishing and maintaining collaborative projects with outside scientists as well as within the J&J Family of Companies.

To qualify, applicants must have a PhD in Materials Science, Chemical Engineering or another related discipline. Must be able to characterize organic compounds and polymers using common chromatographic, thermal and spectroscopic techniques (GPC, HPLC, DSC, TGA, XRD, FTIR, NMR, etc.) or be familiar with common polymer processing techniques (extrusion, injection molding, or composites fabrication). Experience and knowledge of hydrogels would be advantageous. **Dept. 1938.**

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POSITIONS OPEN

SENIOR-LEVEL FACULTY POSITION DEPARTMENT OF MEDICINAL CHEMISTRY University at Buffalo State University of New York

The Department of Medicinal Chemistry invites applications for a tenured, senior-level faculty position (rank open) in medicinal chemistry with an anticipated start date in the 1998-1999 academic year. The department has been a major center for medicinal chemistry training since 1958 and is housed within the School of Pharmacy. Excellent opportunities exist for collaborative studies with other departments within the University such as Chemistry, Pharmaceutics, Biology, and Biochemistry as well as with departments within the Medical School and the Roswell Park Cancer Institute. The department has modern facilities including access to state-of-the-art instrumentation. The University NMR facility includes 500, 600, and 750 MHz spectrometers. Applicants must have a Ph.D. or equivalent as well as other relevant experience and a commitment to excellence in both research and teaching. Preference will be given to candidates employing organic synthesis, bioorganic, or bioinorganic chemistry in biological/medical applications. Candidates should have an established research program with a record of scholarly achievements suitable for appointment to a tenure position at the University at Buffalo. The candidate will be expected to participate in Departmental and University activities and may be considered, in addition, as a candidate for Chair of the Department. More information about the Department of Medicinal Chemistry can be found at our website: <http://wings.buffalo.edu/go/mch>.

Evaluation of candidates will begin April 15, 1998. However, applications will be accepted until the position is filled. Please send applications to:

**Chair, Faculty Search Committee
Department of Medicinal Chemistry
SUNY at Buffalo
North Campus, Cooke 457
Amherst, NY 14260**

The Department of Medicinal Chemistry is particularly interested in considering applications from women, ethnic minorities, or disabled persons. SUNY at Buffalo is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN RADIATION BIOLOGY AT STANFORD UNIVERSITY

The Division of Radiation Biology of the Department of Radiation Oncology is seeking applicants for a tenure-track position at the **ASSOCIATE** or **FULL PROFESSOR** level. We seek outstanding applicants with proven research records in the application of molecular biology to study the response of cells to stress with an emphasis on that caused by ionizing radiation and/or anticancer therapies or the microenvironment of solid tumors. 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 in molecular aspects of cellular stress to hypoxic conditions, determinants of resistance of cancers to treatment, and DNA damage and repair following ionizing radiation. Applicants should submit curriculum vitae and names of three references to: **Dr. J. Martin Brown, Director, Division of Radiation Biology, Department of Radiation Oncology, Stanford University School of Medicine, Stanford, CA 94305-5468.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

FACULTY POSITION

Applications are invited for a tenure-track faculty position in the Department of Biomedical Sciences. Minimum qualifications include M.D. or Ph.D. in either pathology, physiology, or pharmacology with appropriate related teaching and research experience. Teaching responsibility includes pathophysiology and physiology for undergraduate students. Rank and salary commensurate with qualifications. Application deadline: April 30, 1998. Send curriculum vitae and the names and addresses of three references to: **Department of Biomedical Sciences, UCOM 6108, University of South Alabama, Mobile, AL 36688.** E-mail: sitaya@usmail.usouthal.edu; website: <http://www.usouthal.edu/usa/allied/biomedic.htm>. *The University of South Alabama is an Affirmative Action/Equal Employment Opportunity. Minorities/Females/Disabled.*

POSITIONS OPEN



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CARL F. ASSEFF ENDOWED RESEARCH PROFESSORSHIP IN OPHTHALMOLOGY

Applications and nominations are invited for the newly established Carl F. Asseff Endowed Research Professorship in the study of the molecular genetics of eye diseases in the Department of Ophthalmology, Case Western Reserve University (CWRU), School of Medicine and University Hospitals of Cleveland, Cleveland, Ohio. Qualifications must include an outstanding record as a scientist and educator at the Associate Professor or Professor level. The successful applicant will be expected to enhance and lead visual sciences research within the Department with special emphasis in the genetics and functional genomics of eye diseases in humans or animal models and in collaboration with other departments within the CWRU Visual Sciences Research Center. Reply in confidence with a letter of interest, curriculum vitae, and the names of three or more references to: **Jonathan H. Lass, M.D., Charles I. Thomas, Professor and Chairman, Case Western Reserve University Department of Ophthalmology, 11100 Euclid Avenue, Cleveland, OH 44106-5068.**

Review of applications will begin June 1, 1998, and continue until the position is filled. *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN RETROVIROLOGY

The Department of Microbiology and Immunology and the Sylvester Comprehensive Cancer Center at the University of Miami invite applications for a tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level for Investigators with research interests in the development of a program in HIV-related malignancies. Applicants should have a Ph.D. or M.D. degree. Those who wish to be considered for the position at the level of Associate Professor should also have an established, funded research program. Special consideration will be given to individuals who are particularly interested in the mechanisms of viral oncogenesis, transcriptional regulation, and/or signal transduction. The chief criteria for candidates are proven excellence in research and the potential to develop an externally funded research program.

This individual will work closely with researchers and clinicians at the Sylvester Cancer Center's HIV-related malignancies program.

Interested applicants should send a current curriculum vitae, a statement describing research achievement and future research plans, and names and addresses of three references to:

**Dr. William Harrington, Jr.
c/o Desiree Uptgrov
Sylvester Comprehensive Cancer Center
University of Miami School of Medicine
P.O. Box 01932 (M-877)
Miami, FL 33101**

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

FACULTY POSITION PHARMACOLOGY AND TOXICOLOGY

A tenure-track faculty position at the **ASSISTANT PROFESSOR** level is available in the Department of Medical Pharmacology and Toxicology, College of Medicine, Texas A&M University Health Science Center. The successful candidate is expected to develop a strong independent research program and participate in medical and graduate teaching. The position will be available in the fall of 1998. All research areas of pharmacology are relevant. Program strengths within the department include ocular, cardiovascular, and neuropharmacology, as well as toxicology. Applications should include curriculum vitae, selected reprints, statement of research interests, and three letters of reference. Review of applications will begin May 1, 1998, and will continue until the position is filled. Please send your application to: **Dr. William H. Griffith, Chair, Search Committee, Department of Medical Pharmacology and Toxicology, Texas A&M University Health Science Center, College Station, TX 77843-1114.** *Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION NEUROSCIENTIST

Northwestern University Medical School
Department of Physiology and
Feinberg Clinical Neuroscience Research Institute

The Department of Physiology and the Feinberg Clinical Neuroscience Research Institute are seeking a highly qualified individual to develop an independent research program in areas related to fundamental mechanisms that may underlie ischemic brain injury.

The appointee will be a full-time, tenure-track faculty member with appointments in physiology and in neurology or neurosurgery. Candidates should have a record of outstanding research accomplishments and demonstrated ability to maintain effective interactions between basic science and clinical disciplines related to the study of ischemic brain injury. The level of appointment will be commensurate with the qualifications of the successful applicant. To ensure full consideration, applications should be received before June 15, 1998.

Please send a curriculum vitae, statement of research interests, and the names and addresses of four references to:

**Dr. Shaun Morrison
Search Committee Chairman
Department of Physiology (M211)
Northwestern University Medical School
303 East Chicago Avenue
Chicago, IL 60611**

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Minorities, disabled, and women are particularly encouraged to apply. Hiring is contingent on eligibility to work in the United States.

UNIVERSITY OF KANSAS CHAIR, DEPARTMENT OF BIOCHEMISTRY, CELL AND MOLECULAR BIOLOGY

The University of Kansas (KU) invites applications and nominations for the position of Professor and Chair in the Department of Biochemistry, Cell and Molecular Biology. KU is located in historic Lawrence about 35 miles west of Kansas City and enrolls about 25,000 students. The department consists of 25 full-time faculty, and has an extraordinary opportunity for growth by adding eight new faculty in the next five years. The department represents a broad range of research interests, with graduate programs in biochemistry and biophysics, molecular genetics, cell and developmental biology, and neurobiology. It currently enrolls about 250 undergraduate majors and 65 graduate students.

The faculty seeks a distinguished scientist to provide academic and administrative leadership to the research and teaching programs of the department. Candidates must have a Ph.D. or equivalent degree in the biological sciences, or a related area, and have internationally recognized academic accomplishments. Candidates should send a letter of application, curriculum vitae, statement of research interests, and the names of at least three references to: **Dr. Richard Himes, BCMB Search Committee, Department of Biochemistry, Cell and Molecular Biology, University of Kansas, Lawrence, KS 66045-2106.** The review of applications will start June 1, 1998, and will continue until the position has been filled. Interviews will start early fall 1998. *Equal Employment Opportunity/Affirmative Action Employer.*

TENURE-TRACK FACULTY POSITION is available in the recently formed Center for Biomaterials to study material-tissue interfacial behavior, with emphasis on molecular and cellular mechanisms. Areas of interest include tissue response, modification and characterization of surfaces, development of new biomaterials, and tissue engineering. Applicants with expertise in structural biology, drug delivery, or cell biology are especially encouraged to apply. Successful candidates will have demonstrated outstanding research achievement. Academic rank commensurate with accomplishments. Excellent opportunities are available for collaboration and significant support is available for research start-up. Applicants should send a curriculum vitae, copies of recent significant publications, and brief descriptions of current research, future plans, and research funding experience to: **Dr. A. Jon Goldberg, Director, Center for Biomaterials, MC 1615, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-1615.** Website: <http://it.uchc.edu/biomaterials>.

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This new advertising supplement feature explores research disciplines and topics that offer exciting opportunities for professional growth. Look for these career focus pages publishing in *SCIENCE* this year.

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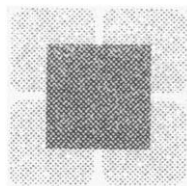
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TISSUE ENGINEERING POSITIONS Department of Biomedical Engineering Lerner Research Institute The Cleveland Clinic Foundation

The Department of Biomedical Engineering is seeking candidates for three faculty appointments at the Assistant, Associate, or Full Staff (equivalent to Professor) level in the area of Tissue Engineering. Applicants must have a Ph.D. or equivalent and in-depth research experience in Engineering, Biomaterials, Biomechanics, Connective Tissue Biology, or related areas, with emphasis on musculoskeletal or cardiovascular biology.

Successful candidates will receive seed funding, and are expected to develop independent research programs and secure extramural funding to support their research activities. The Department contains exceptional expertise in a broad range of research activities including: cardiovascular and orthopedic devices for clinical use; image analysis and computational modalities; biomechanics of both soft and mineralized tissues; and biology, biochemistry, and molecular biology of connective tissue. The multidisciplinary approach to research activities gives the Department exceptional breadth as well as depth. General information about the Department of Biomedical Engineering and the Lerner Research Institute can be found on our Internet site at <http://www.ccf.org/ri/CCFRI.html>. The Department will be relocating into new facilities by January 1999.

Applicants should send résumé in confidence to:

V. C. Hascall, Ph.D., Chairman, Search Committee
Department of Biomedical Engineering (Wb3)
The Cleveland Clinic Foundation
9500 Euclid Avenue, Cleveland, OH 44195
Telephone: (216) 445-5676; FAX: (216) 445-4383

The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.



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

POSTDOCTORAL POSITION SIGNAL TRANSDUCTION BY MITOGENIC RECEPTORS

A postdoctoral position is available to study signal transduction pathways activated by neuropeptide and growth factor receptors in brain tumors. The role of these mitogenic receptors in stimulating the growth of astroglial cells is being investigated using biochemical, pharmacological, and molecular approaches (see: *Cancer Research* 56:4983-4991, 1996; *Molecular and Cellular Endocrinology* 130:119-130, 1997; *Cell Growth and Differentiation* 8:1225-1240, 1997). Candidates should have a strong research experience and a recent Ph.D. in Molecular Biology, or a related field. Interest in cancer research is a plus.

St. Jude Children's Research Hospital (Danny Thomas, Founder) is an outstanding research center for biomedical research and provides an exceptional environment for scientific achievement and career development. Stipend and benefits are highly competitive.

Send a letter of interest, curriculum vitae and names of three references to: **Dr. M. Sharif, Department of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. Fax: (901) 521-1668. Please visit our website: www.stjude.org**

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR STRUCTURAL BIOLOGY OF SIGNAL TRANSDUCTION University of North Carolina

The Department of Pharmacology in the School of Medicine at the University of North Carolina at Chapel Hill (UNC-CH) invites applications for a tenure-track faculty position at the Assistant or Associate Professor level. The Department wishes to complement its strong expertise in signaling through G proteins, ion channels, and integrins by identifying a Structural Biologist who applies spectroscopic (NMR, X-ray, CD, fluorescence), calorimetric (ITC, DSC), surface plasmon resonance, or other technologies to questions of importance in the broad area of signal transduction. Rich opportunities for collaboration with other Structural Biologists currently using these approaches exist within the Medical School and University community. The successful candidate will receive an excellent start-up package and have access to graduate students from a strong NIH-supported departmental graduate program and from various interdepartmental graduate-training curricula. Candidates should possess a Ph.D. or M.D. degree and have completed two or more years of postdoctoral training. Applicants for the Assistant Professor position should have demonstrated excellence in their research. Applicants for the Associate Professor position should be recognized as emerging leaders in their field of interest. The successful candidate is expected to establish a vigorous, independent research program as well as participate in training medical and graduate students. Applicants should send curriculum vitae, a letter describing current research interests and future research plans, and the names and addresses of three references to: **Dr. Ken McCarthy, Search Committee Chair, Department of Pharmacology, CB#7365, University of North Carolina, Chapel Hill, NC 27599-7365.** Alternatively, you may send this information via e-mail: phco_search@med.unc.edu. Review of the applications will begin in April 1998 and continue until an applicant is selected and recruited.

Our Department is committed to increasing representation of women and members of minority groups on our faculty and particularly encourages applications from such candidates. UNC-CH is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF FLORIDA

ASSISTANT/ASSOCIATE PROFESSOR/PROFESSOR position in geriatric medicine. The Department of Medicine, and Geriatric Research, Education, and Clinical Center (GRECC), VA Medical Center, Gainesville, Florida invites applications for a tenure-track position. The candidate should be an M.D., Board-certified in internal medicine with an interest in geriatrics and diabetes or obesity. The position will have a strong emphasis on research and the candidate must have demonstrated successful peer review. The successful candidate will join the GRECC faculty of four M.D.'s and four Ph.D.'s. Salary and benefits will be commensurate with education and experience. Application deadline: April 9, 1998. Anticipated starting date July 1, 1998. For consideration send curriculum vitae to: **David T. Lowenthal, M.D., Ph.D., Director, Geriatric Research, Education, and Clinical Center, VA Medical Center GRECC/182, 1601 S.W. Archer Road, Gainesville, FL 32608-1197.** An Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

The University of Alabama at Birmingham (UAB) School of Education, seeks an **ASSISTANT/ASSOCIATE PROFESSOR** (tenure-track) in science education. Qualifications include earned doctorate in science education (strong background in a science discipline) or earned doctorate in a science discipline (strong background working in schools), grant writing skills, ability to teach and develop elementary and/or secondary science methods courses, ability to coordinate collaborative activities among university, P-12, and community personnel.

Applicants should submit a letter of interest, detailed résumé, and names, telephone numbers, and addresses of three references to: **Dr. Mona Eason, School of Education, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294-1250.** Screening of applications will begin May 1, 1998, and continue until position is filled. Direct questions/nominations to: **Dr. Eason, Telephone: 205-934-5322.** UAB is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY OF MEDICINE ACADEMIC APPOINTMENTS American University of Beirut Beirut, Lebanon

The Department of Biochemistry at the American University of Beirut invites applications for the position of **PROFESSOR AND CHAIR** of the Department of Biochemistry.

The candidate must have a Ph.D. or M.D. with training in biochemistry, and have an outstanding record of scientific accomplishments, research funding, graduate and medical education, and evidence of administrative and leadership ability.

For confidential consideration please submit by June 30, 1998, your curriculum vitae to:

**Dean, Faculty of Medicine and Medical Center
American University of Beirut
850 Third Avenue, 18th Floor
New York, NY 10022-6297
FAX: 011-961-1-744464
E-mail: snajjar@aub.edu.lb**

The American University of Beirut is an Affirmative Action/Equal Opportunity Employer. AUB's website: <http://www.aub.edu.lb>

TWO FACULTY POSITIONS RESEARCH DEPARTMENT PORTLAND SHRINERS HOSPITAL

Applications are invited for two faculty positions in the Research Department of the Portland Shriners Hospital. The Department is building a new program within the broad area of vertebrate limb development and seeks outstanding scientists who will establish independent and innovative research programs in this area. Applicants should have expertise and a strong record in developmental biology, developmental genetics, or a related field. Areas of interest may range from morphogenesis and patterning to cell-matrix interactions to gene regulation. Applicants for one of the positions must have expertise in transgenic and gene targeting technologies. The new program will complement existing departmental programs in matrix biology, structural biochemistry, molecular biology, and genetics. The Department occupies outstanding new research facilities and provides generous start-up packages. Both positions will carry full academic appointments in basic science departments at Oregon Health Sciences University, with which the Department is closely affiliated. For more information see website: <http://www.shcc/research>.

Applicants should send curriculum vitae, publications, statement of research plans, and three letters of reference to: **W. A. Horton, Director, Research Department, Portland Shriners Hospital, 3101 S.W. Sam Jackson Park Road, Portland, OR 97201. FAX: 503-221-3451; e-mail: wah@shcc.org.**

NEUROPATHOLOGIST

The Departments of Pathology and of Pharmacological and Physiological Sciences at the University of Chicago is seeking a faculty member specializing in neuropathology. Applicants should be Board-certified/eligible in anatomic or anatomic/neuropathology. The successful applicant is expected to develop an independent research program in the pathophysiology of neurodevelopmental or neurodegenerative diseases. Opportunities for collaborative research are also available. Additionally, the applicant will have responsibilities in diagnostic neuropathology and teaching of medical students, residents, and graduate students. Academic rank will be based on experience and accomplishments. Salary is negotiable. Excellent benefit package is included.

Please send curriculum vitae with the names and addresses of three referees to: **Godfrey S. Getz, M.D., Ph.D., Chairman, Department of Pathology, or Sam S. Sisodia, Ph.D., Chairman, Department of Pharmacological and Physiological Sciences, The University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637.** The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR (N OR P) FOOD SAFETY Division of Environmental and Occupational Health School of Public Health University of Minnesota

This is a new faculty position (full-time, 12-month, tenured or tenure-track) in the Division of Environmental and Occupational Health. Salary and rank will be commensurate with qualifications. The division is nationally recognized for strong academic specialties in environmental epidemiology, industrial hygiene, environmental policy, occupational and environmental medicine, occupational health nursing, environmental chemistry, environmental microbiology, and environmental toxicology. This position will expand the environmental microbiology specialty by adding the increasingly vital area of food safety. The successful applicant will develop an independent, externally funded research program, teach and advise Master's doctoral students, and participate in outreach activities related to food safety. Qualifications include earned doctorate in related scientific discipline by date of hire, demonstrable research record relevant to food safety, and demonstrable teaching skills in food safety. Submit a curriculum vitae, a letter of interest, and names and addresses of three professional references to: **Donald Vesley, Ph.D., Chair, Search Committee, Division of Environmental and Occupational Health, School of Public Health, University of Minnesota, Box 807 Mayo, 420 Delaware Street S.E., Minneapolis, MN 55455.** Applications will be accepted through July 15, 1998, or until a final selection is made.

The University of Minnesota is an Equal Opportunity Educator and Employer.

ASSISTANT PROFESSOR OF PHYSIOLOGY AND CELL BIOLOGY Harvard School of Public Health

The Department of Environmental Health invites applications for an Assistant Professorship in the physiology program. The most important quality of the successful candidate will be a record of independent and original research in pulmonary inflammation using state-of-the-art techniques of integrative physiology. Current research interests of the program are in areas such as the regulation of adhesion molecules during pulmonary infections, the role and regulation of leukocytes in response to inhaled pollutants, and the effects of inhaled pollutants on host defense. Demonstrated expertise in integrative physiology, infectious disease, or environmental health is essential.

The successful candidate will be expected to instruct graduate students and postgraduates, to continue to develop his or her own independent research program, and to complement current research areas in the department. The candidate will also be responsible for teaching of physiology and pathophysiology to students in the School.

Applicants should send a statement of current and future research interests, curriculum vitae, and the names of three references to: **Jeffrey J. Fredberg, Chair, Ad Hoc Search Committee, Department of Environmental Health, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

Harvard University is committed to increasing the number of women and minorities in its faculty and encourages applications from such candidates.

PHYSIOLOGIST

The Southern Illinois University-School of Dental Medicine, Department of Applied Dental Medicine is seeking applicants at the **ASSISTANT/ASSOCIATE PROFESSOR** level for a tenure-track position, Section of Physiology, available July 1, 1998. Responsibilities include instruction for dental students, as well as research and service activities. Candidates should possess a Ph.D. in physiology, have teaching experience in the health sciences, and demonstrated research productivity. The campus is located near St. Louis. Review of applications will begin April 15, 1998, and continue until position is filled. Send a letter of application and curriculum vitae with three references to: **Dr. Patrick J. Ferrillo, Dean, School of Dental Medicine, Southern Illinois University, 2800 College Avenue, Alton, IL 62002-4900.** Southern Illinois University is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.



University of Otago

Te Whare Wananga o Otago

New Zealand

LECTURER IN PHARMACOLOGY

Applications are being sought for two appointments, available immediately, as Lecturers in the Department of Pharmacology, University of Otago.

Appointments at a higher level will also be considered. The successful applicants will hold a doctoral degree and will have an outstanding record of research accomplishment in any area of pharmacology and/or toxicology and enthusiasm for innovative teaching. The ideal appointees will employ state-of-the-art contemporary methodologies in an area of high clinical relevance.

The department's current interests include studies of signal transduction disturbances in neurodegeneration and pulmonary hypertension, mechanisms of marine toxin-induced hippocampal damage, neuronal cell death and neuroprotection following damage to the vestibular system and hippocampus, role of oxidative stress in hepatotoxicity of commonly used over the counter drugs, cytochrome P450 gene polymorphism and adverse drug reactions; and, in the genetically hypertensive GH rat strain, developed in Otago in the 1950's, studies of resistance artery structure and function and the role of nitric oxide and the endothelium in the pathogenesis of the GH strain.

A research start up package will be made available to the successful candidates.

The Department of Pharmacology is located in the School of Medical Sciences at the University of Otago School of Medicine, the oldest and largest medical school in New Zealand. It is situated in Dunedin, an attractive university town (population 120,000) which offers a very active cultural scene, affordable housing and a high quality of life.

Interested applicants should submit their application as stated in the method below, and should include statements on any external funding accomplishment, up to five reprints of representative research and a statement of vision for future specific research plans.

Specific enquiries about this position should be made to Associate Professor Paul Smith or email; paul.smith@stonebow.otago.ac.nz. Phone: (64) (3) 479 7265; fax; (64)(3)479 9140.

Reference Number: AY98/119. Closing Date: 31 May 1998.

METHOD OF APPLICATION

Further details regarding this position, the University and the application procedure are available from the Deputy Director, Personnel Services, University of Otago, PO Box 56, Dunedin, New Zealand (phone 64-3-479 8269, facsimile 64-3-474 1607 or e-mail david.frame@stonebow.otago.ac.nz). Further information about the University of Otago can be found at our homepage at www.otago.ac.nz. Applicants should send two copies of their curriculum vitae together with the names, addresses and fax numbers of three referees, to the Deputy Director of Personnel Services by the specified closing date, quoting the appropriate reference number.

Equal opportunity in employment is University policy.

E tautoko ana Te Whare Wananga o Otago i te kaupapa whakaorite whiwhinga mahi.



THE UNIVERSITY
OF QUEENSLAND

Equal opportunity in employment is University policy.

Chair of Botany

DEPARTMENT OF BOTANY

Applications are invited for the position of Chair of Botany at the University of Queensland.

The Department of Botany is a leading Australian provider of undergraduate and postgraduate education in the plant sciences. The Department in 1998 includes two professors, four associate professors, five senior lecturers, four lecturers, one associate lecturer, four administrative staff and ten technical staff; teaching the equivalent of 288 full-time students, including 95 postgraduate students, pursuing bachelors and higher degrees in science, applied science and agricultural sciences. Areas of teaching and research strength in the Department include ecology and tropical forest biology, plant evolution and genetics, plant pathology and mycology, plant physiology and biochemistry, plant molecular biology, and marine botany. Facilities include world-class research laboratories, plant growth facilities, molecular and biochemical analysis facilities and established terrestrial and marine field sites. The Department participates in cooperative research centres in tropical plant pathology and tropical rainforest ecosystem management, and has strong collaborative links in research and postgraduate supervision to key industry and government research agencies concerned with tropical and sub-tropical plants.

The appointee to the Chair of Botany will be a distinguished scientist, with an outstanding record of scientific achievement combined with teaching at the undergraduate and postgraduate levels in plant biology, who will enhance the departmental strengths in teaching and research. The appointee will have a particular responsibility to provide academic leadership to the Department as a whole, requiring strong insight into the broader discipline and the ability to represent the discipline strongly within and beyond the University.

The appointment will be expected to assume the Headship of the Department for a period of five years in the first instance, requiring skills in personnel and financial management, and the capacity to develop new sources of income based on the strengths of the Department. The successful applicant will be required to take up duty as soon as possible on a date to be agreed with the University.

The salary for Professors (Level E) is: A\$89,596 per annum (further salary increases are approved for 1998). A salary loading for the Headship of the Department also applies.

Further information about the position, including details of applications procedure, employment conditions, selection criteria and duty statement, may be obtained from Associate Professor Christa Critchley, telephone +61-7-3365-3470, fax +61-7-3365-1699 or email c.critchley@botany.uq.edu.au.

Four written applications (an original plus three copies) quoting **Reference No. 11698**, should be forwarded to the Personnel Officer, Faculty of Biological and Chemical Sciences, The University of Queensland, Brisbane Qld 4072 Australia.

Closing date for applications: 8 May 1998.

POSITIONS OPEN

ASSISTANT PROFESSOR UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

The Division of Renal Diseases and Hypertension of the University of Colorado Health Sciences Center (UCHSC) is seeking an Assistant Professor faculty position for its arginine vasopressin research group. Research in this group is focused on vasopressin action in the water-retaining states of cirrhosis, cardiac heart failure, and pregnancy using *in vivo* animal models and molecular biology techniques. Successful candidates will be expected to supervise research team including Fellows and Professional Research Assistant(s), design research studies including budgets with the Principal Investigator(s), provide instruction to Research Fellows, and write and submit journal articles for publication.

Requirements: Ph.D. and extensive postdoctoral training required. Salary: competitive/based upon experience. Send curriculum vitae and three references to: **Administrator—RWS, Division of Renal Diseases and Hypertension, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Campus Box C281, Denver, CO 80262.** No telephone calls please.

ASSISTANT PROFESSOR

The Department of Oral Biology of the University of Nebraska Medical Center College of Dentistry is expanding its research focus in molecular biology. A full-time tenure-track position at the level of Assistant Professor is available beginning July 1998. We seek an individual with the ability to develop an externally funded research program in mammalian molecular biology with a focus on one of the following: experimental pathology, histopathology, or inflammation/immunology; and a commitment to excellence in teaching professional and graduate students in one or more of the following areas (oral emphasis): histology, pathology, biochemistry and nutrition, oral biology. Ph.D. or equivalent degree required. Postdoctoral experience preferred. Review of applicants will continue until position is filled. Send curriculum vitae, selected reprints, a statement of research plans, and the names, addresses, and telephone numbers of three references to: **Office of the Dean, Room 115, University of Nebraska Medical Center College of Dentistry, 40th and Holdrege Streets, Lincoln, NE 68583-0740.** An Equal Opportunity/Affirmative Action Employer.

PHYSICAL ANTHROPOLOGIST/ PRIMATOLOGIST

The Department of Anthropology at the State University of New York at Stony Brook invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**, beginning September 1999. Applicants should have an active and ongoing research interest in the study of behavior or ecology with a strong basis in evolutionary theory and a focus on the biology of nonhuman primates. Special consideration will be given to applicants who approach sociobiological questions from a combined perspective of behavioral field studies and genetic or hormonal analyses. Send application letter, curriculum vitae, a brief description of ongoing and planned research, and names, addresses, and telephone numbers of three references to: **Diane Doran, Search Committee, Department of Anthropology, SUNY at Stony Brook, Stony Brook, NY 11794-4364** before September 30, 1998. *Women and minorities are encouraged to apply. SUNY is an Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK ASSISTANT PROFESSOR in biology. Ph.D. to primarily teach comparative morphology, animal physiology, and supervise undergraduate research. August 15, 1998. A maturing and enthusiastic Christian faith and commitment to the mission of a residential, evangelical Christian university essential. E-mail or FAX letter and curriculum vitae to: **Dr. Glenn Sumrall, Provost, LeTourneau University, e-mail: sumrallg@letu.edu; FAX: 903-233-3227.** Applicants agreeing with mission of LeTourneau University are considered without regard to race, age, sex, disabled condition, or national origin.

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Physiology of the Northeastern Ohio Universities College of Medicine (NEOUCOM) is seeking applicants to fill a tenure-track position in the area of signal transduction. The Department has a cardiopulmonary research focus and invites applications from individuals investigating intracellular signaling/gene regulation in either the heart, vasculature, or lungs to complement ongoing programs in these areas. Candidates must have a Ph.D. and/or M.D. with appropriate Postdoctoral Fellowship training, a strong record of research accomplishment, and the ability to establish an independent externally funded program. Excellent opportunities exist within the Department and Institution for collaboration. Medical student teaching responsibilities will be to participate in teaching physiology to first- and second-year students. Department faculty are members of graduate faculty in programs leading to the Ph.D. through the School of Biomedical Sciences at Kent State University. The successful candidate will have the opportunity to develop graduate courses that relate to his/her specialty. Further information about the Department and Institution can be obtained from the NEOUCOM website: <http://www.neoucom.edu>. Candidates should send a letter of application describing research experience and goals, accompanied by a curriculum vitae, and the names and addresses of three references, by May 22, 1998, to:

**Human Resources
c/o Michael B. Maron, Ph.D.
Professor and Chairperson
Department of Physiology
Northeastern Ohio Universities
College of Medicine
P.O. Box 95
Rootstown, OH 44272-0095**

NEOUCOM is an Affirmative Action/Equal Opportunity Employer.

SENIOR ENVIRONMENTAL SCIENTIST/ENGINEER

The graduate environmental science program at the University of North Texas (UNT) is seeking a Senior Environmental Scientist/Engineer for a tenured **FULL PROFESSOR** faculty position beginning the fall semester 1998. Applicants are sought whose research and teaching interest and experience relate to ecological risk assessment focusing on the fate and effects of chemical, physical, and biological stressors in terrestrial or aquatic ecosystems. The successful candidate must have demonstrated the ability to develop and sustain a productive interdisciplinary research program and have national/international recognition for leadership in his or her profession. Job responsibilities include teaching, research, and outreach. Applicants must send letter of interest, résumé, and names and addresses (mail and e-mail) of references by May 15, 1998. Search will remain open until position is filled. Contact: **Dr. Ken Dickson, Environmental Science Program, Department of Biological Science, University of North Texas, P.O. Box 310559, Denton, TX 76203. E-mail: dickson@unt.edu.**

Information about UNT and the environmental science program can be found at **website: www.unt.edu** and **website: www.ias.unt.edu.** An Equal Employment Opportunity/Affirmative Action Employer.

LABORATORY SCIENTIST in pediatric hematology-oncology. The Division of Hematology-Oncology, Department of Pediatrics, University of Texas Southwestern Medical Center at Dallas is seeking a full-time faculty member at the **ASSISTANT PROFESSOR** level who will be charged with developing an outstanding basic research program involving the initiation, progression, or control of childhood malignancy. The candidate should have the M.D. or M.D.-Ph.D. degree and should have shown great promise during their initial research experiences. Successful candidates will spend 80 to 90 percent of their time in laboratory research, with the remainder devoted to clinical responsibilities and teaching. Generous start-up funds are available to support the development of an independent research program at one of the nation's largest pediatric cancer centers. This position is available immediately. For further information, contact: **George R. Buchanan, M.D., Department of Pediatrics, University of Texas Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75235-9063. Telephone: 214-648-8594; FAX: 214-648-3122.** The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR MARINE EXTENSION SERVICE

The University of Georgia seeks a Director for the Marine Extension Service (MAREX), the public service and outreach component of the School of Marine Programs (SMP). MAREX provides marine educational programs for kindergarten through grade 12 and college students, technical assistance to marine-related industries, and conducts applied research on problems affecting seafood harvesting and processing industries. MAREX operates major coastal facilities in Brunswick and Savannah, with additional administrative and educational facilities in Athens and an outreach office in Atlanta. Director administers all MAREX staff and programs, and coordinates activities with the other four SMP units; industry; local, state, and federal agencies; and the general public. Ph.D. preferred. Additional academic appointment as appropriate. Extensive experience in administration of marine education, outreach, and/or applied research programs required. Written and oral communication skills a must. Send curriculum vitae, summary of administrative philosophy, and the names of at least three references to: **Chair, MAREX Search Committee, Director's Office, School of Marine Programs, Marine Sciences Building, University of Georgia, Athens, GA 30602.** Applications received by April 30, 1998, are assured full consideration. For general information about MAREX please see our website: www.marsci.uga.edu/ext/MAREX.html. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

ASSISTANT PROFESSOR in the Program for Population Genetics, Department of Environmental Health, Harvard School of Public Health. The successful candidate will have a strong theoretical background including a doctoral degree in statistics, statistical genetics, or a related field. The candidate will perform data analysis and will carry out independent research that furthers the Program's gene mapping capabilities. The candidate will also be required to participate in study design, grant preparation, data management, and quality control. The candidate will teach statistical genetics and instruct graduate students and postgraduates. Applicants should send a statement of current and future research interests, curriculum vitae, and the names of three references to: **Dr. Karl Kelsey, Chair, Ad Hoc Search Committee, Department of Environmental Health, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.** Harvard University encourages qualified women and minority applicants.

RESEARCH ASSISTANT PROFESSOR. (98UC4025) The Department of Psychiatry Division of Addiction Pharmacology at the University of Cincinnati (UC) School of Medicine is seeking a Ph.D. scientist to lead microdialysis studies of cocaine sensitization mechanisms. This is a full-time Assistant Professor (research) non-tenure-track appointment. UC is the site of a NIDA center with one of the largest, rapidly growing preclinical and clinical groups (including Ming Xu, Ph.D., Lei Yu, Ph.D., Gary Gudelsky, Ph.D., and Charles Vorhees, Ph.D.) nationally working on stimulant sensitization, stimulant neurotoxicity, and opioid tolerance mechanism. Send curriculum vitae (including control number) to: **Paul Berger, M.D., University of Cincinnati, P.O. Box 670559, Cincinnati, OH 45267-0559. FAX: 513-558-4805; e-mail: bergerp@email.uc.edu.** Résumés accepted until filled. UC is a smoke-free environment. Affirmative Action/Equal Opportunity Employer.

RESEARCH POSITION FOR A MOLECULAR-MODELING INVESTIGATOR At The Brazilian National Synchrotron Laboratory

A permanent position is available at the Brazilian National Synchrotron Laboratory. Candidates must have a Ph.D., postdoctoral experience, and solid knowledge in biochemistry and molecular modeling. Strong skills in computation are desirable. Experience with protein crystallography, including data collection, structure solution, and refinement is an advantage but not required.

Information on the Institution is available at **website: http://www.inls.br.** Candidates are requested to send their curricula vitae plus the names and addresses (including e-mail) of at least two referees to: **Dr. Rogerio Meneghini, Laboratorio Nacional de Luz Sincrotron, Caixa Postal 6192, Campinas, SP 13083-970 Brazil. E-mail: diane@inls.br.** The deadline for receipt of curricula vitae is June 30, 1998.

The Schepens Eye Research Institute Harvard Medical School

Multiple positions are available immediately within 2 labs for postdoctoral fellows to pursue the following research projects:

- 1) The study of molecular regulation of corneal epithelial wound healing, including involvement of transcription factors, serine protease/protease inhibitors, and proteoglycans.
- 2) The study of transcription factor interactions mediating photoreceptor-specific gene expression in normal and malignant situations.

A PhD and/or MD is required; research training in molecular biology, cell biology and/or biochemistry is desired. Preference will be given to those eligible for future funding via NRSA grants. Please submit curriculum vitae and names of three references to:

Dr. Fu-Shin Yu (fushinyu@vision.eri.harvard.edu) or
Dr. Santa J. Ono (sjono@vision.eri.harvard.edu)

The Schepens Eye Research Institute
Harvard Medical School
20 Staniford Street
Boston, MA 02114

SERI and Harvard Medical School are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.



CASE WESTERN RESERVE UNIVERSITY

Faculty Positions Department of Pharmacology School of Medicine Case Western Reserve University

The Department of Pharmacology at CWRU has immediate openings for tenure-track positions at Assistant Professor level. More senior candidates will be considered. We are seeking candidates in two broad areas; however, any area of research relevant to pharmacology will be considered: (1) Pharmacology and Cell Biology of Hormone-Responsive Malignancies, including endocrine pharmacology and drug design for breast, prostate, or other hormonally-related tumors. (2) Novel Chemical Approaches to Biological Problems including combinatorial chemistry and computer-based drug design. For either position, applications from candidates using genomic approaches or having a genetic component to their research would be particularly welcome. Current faculty interests include study of reproductive endocrinology using transgenic animals, apoptosis, receptor regulation and assembly, membrane transport, bacterial pathogenesis, oxidative stress, sulfhydryl homeostasis, and regulation of the cytoskeleton via small G-proteins and chaperonins.

Please send a C.V., up to 3 reprints, a short description of research interests, and names of 3 references to:

Dr. Michael E. Maguire
Chair, Pharmacology Faculty Search Committee
Department of Pharmacology
Case Western Reserve University
10900 Euclid Avenue
Cleveland, OH 44106-4965
CWRU is an EEOC/AA employer.



St. Jude Children's Research Hospital

ALSAC • Danny Thomas, Founder

Doctoral and Post- Doctoral Training in Structural Biology

St. Jude Children's Research Hospital (www.stjude.org) is a premier center for biomedical research into the basic mechanisms of childhood diseases, including cancer and HIV. The Department of Structural Biology offers doctoral and post-doctoral training in biomolecular X-ray crystallography, NMR spectroscopy and biophysics. A number of institutionally-funded positions are available with the following faculty members.

Dr. Stephen White (Chairman, stephen.white@stjude.org) is working on crystallographic analyses of protein-RNA and protein-DNA complexes involved in replication, transcription and translation. Specific projects include prokaryotic ribosomal proteins and the terminator protein of *B. Subtilis*.

Dr. Richard Kriwacki (Assistant Member, richard.kriwacki@stjude.org) is performing NMR-based structural and biophysical studies of growth inhibitors, tumor suppressors, and oncogenes. Two specific projects include structural and biophysical studies of the p21 family of cell cycle inhibitors and their interactions with cyclin/kinase complexes (PNAS 93, p. 11504-11509, 1996; JACS 118, p. 5320-5321, 1996), and NMR-based structure determination of the Qin oncogene (Virology 238, p. 1-7, 1997).

Dr. Hee-Won Park (Assistant Member, hee-won.park@stjude.org) is interested in using X-ray crystallography to study (i) receptor-mediated effects of cytokines for understanding their roles in many aspects of myeloid and lymphoid functions; (ii) structure/function relationships of human DNA repair enzymes for providing a better understanding of carcinogenesis; (iii) the role of protein disulfide isomerase in facilitating the folding and maturation of nascent secretory proteins.

Applicants should have experience or seek training in: protein crystallography & crystallization, biomolecular NMR, molecular biology, protein expression & purification, protein binding & folding studies, and/or cell culture techniques. Graduate student applicants should ideally have a B. S. in the biological or physical sciences and desire training in structural biology. The Department of Structural Biology, St. Jude, is affiliated with the Department of Biochemistry, University of Tennessee, Memphis, and students will receive their Ph.D. degree from UT, Memphis, and perform research at St. Jude. Tuition and stipend support is provided by St. Jude. State-of-the-art equipment for protein crystallography, NMR spectroscopy and computer graphics is located within the Department, along with facilities for biochemistry, molecular biology, and biophysics.

Please contact individual faculty members by e-mail or by mail at:

Department of Structural Biology
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105

AA/EOE

POSITIONS OPEN

The U.S. Geological Survey, Biological Resources Division, has four openings for **SENIOR SCIENTISTS** (salary range \$57,000 to \$88,000). The incumbents will coordinate national research and environmental policy related to the status and trends of biological resources, wildlife ecology, fisheries and aquatic science, and ecosystem science. Responsibilities include an ability to work with established interdisciplinary teams of scientists to develop and build science research programs through advocacy at the USGS and national levels.

These positions are open to all qualified applicants. The application closing date is April 16, 1997. Application information is available on the Internet at [website: www.usgs.gov/dot/avads](http://www.usgs.gov/dot/avads). For further information call USGS personnel at **Telephone: 703-648-7788**.

EXECUTIVE DIRECTOR AMERICAN ASSOCIATION OF ANATOMISTS

The American Association of Anatomists (AAA), a professional scientific society representing approximately 2,500 biomedical researchers primarily in the United States and Canada, is searching for an Executive Director for its National Office at FASEB Headquarters in Bethesda, Maryland. The successful candidate would begin employment on or before July 1, 1998.

The Executive Director of the American Association of Anatomists reports to the Association's Executive Committee and is responsible for managing the day-to-day activities of the National Office (including National Office Staff), editing the AAA newsletter and website, implementing the public affairs activities of the Association, managing the nonscientific aspects of the Association's annual meeting, and liaising with officers of FASEB, the Chair's Association, and other scientific societies as appropriate. The Executive Director serves on all committees of the Association in an *ex officio*, nonvoting, capacity and prepares draft minutes of meetings of the Executive Committee, the President's Breakfast, and the Business Meeting. Additional information about the American Association of Anatomists is available at the Society's [website: http://www.anatomy.org/anatomy/](http://www.anatomy.org/anatomy/).

Candidates for this position should submit a letter of interest and their curriculum vitae no later May 22, 1998, in strict confidence to:

Dr. Duane E. Haines
Secretary-Treasurer, American Association of Anatomists
Department of Anatomy
University of Mississippi Medical Center
2500 North State Street
Jackson, MS 39216-4505
Telephone: 601-984-1640
FAX: 601-984-1655
E-mail: dehaines@siona.umsnec.edu

The American Association of Anatomists is an Equal Opportunity Employer.

The University of Florida, Institute of Food and Agricultural Sciences has a 12-month tenure-track faculty position, **ASSISTANT PROFESSOR, PLANT PATHOLOGIST**, disease management (60 percent extension and 40 percent research) available after July 1, 1998. Contact: **Dr. F. M. Shokes**, Chair, Search and Screen Committee, North Florida Research and Education Center, Route 3, Box 4370, Quincy, FL 32351 for application process (application closing date 1 May 1998). **Telephone: 850-875-7112; FAX: 850-875-7148; e-mail: fms@gvn.ifas.ufl.edu**. The University of Florida is an Equal Opportunity/Equal Access/Affirmative Action Employer. Women and minorities are encouraged to apply.

RESEARCH ASSOCIATE (Ph.D.). To work in the Laboratory of Structural Neuroscience at McLean Hospital, Belmont, Massachusetts, a Harvard teaching hospital, doing *in situ* hybridization studies of the dopamine and GABA systems in limbic cortex of rat and human brain. The focus is on questions related to schizophrenia and manic depression. Position carries an appointment as Instructor in psychiatry at Harvard. Background in molecular biology required. Contact: **Francine M. Benes, M.D., Ph.D., e-mail: benesf@mclean.org; FAX: 617-855-3199**. Check our [website: benesville.mclean.org](http://www.benesville.mclean.org); 8080.

POSITIONS OPEN



At CoCensys, Inc., we're on the leading edge of discovering, developing, and marketing advanced products for the treatment of neurological and psychiatric disorders. Focused on developing novel, small molecules, we're creating treatments for migraine, epilepsy, anxiety, insomnia, stroke, head trauma, and neurodegenerative diseases. Currently, CoCensys has the following positions available within its Biochemical and Molecular Pharmacology Department.

POSTDOCTORAL MOLECULAR BIOLOGY

Requires a Ph.D. in molecular biology or related discipline with research experience in generating cell lines expressing recombinant receptors. Strong oral and written communication skills along with excellent interpersonal skills are essential in this team-orientated environment.

SCIENTIST BIOCHEMICAL PHARMACOLOGY

A laboratory research position for a B.S./M.S. scientist with training in biochemistry or a related discipline. Experience with biochemical techniques is essential and molecular biology techniques is desirable. Effective oral and written communication skills, excellent interpersonal skills, and team orientation are essential.

We offer an attractive compensation and benefits package including medical and dental plans, stock options, 401(k), pre-tax benefits, and more. We provide a high quality, dynamic, and professional working environment. For confidential consideration, please mail, FAX, or e-mail your curriculum vitae/résumé with salary history/requirements to: **CoCensys, Inc., Attn. Human Resources—#Scie-040398, 201 Technology Drive, Irvine, CA 92618. FAX: 714-753-6135; e-mail: jobs@cocensys.com**. For more information, visit [website: www.cocensys.com](http://www.cocensys.com). *CoCensys is an Equal Opportunity Employer.*

TRIBECA PHARMACEUTICALS

TriBeCa Pharmaceuticals is a newly formed company focused on target discovery to combat human viral pathogens. Located in the exciting SoHo district of New York City, TriBeCa is currently seeking two candidates to join their anti-herpesvirus group.

A **RESEARCH SCIENTIST** is sought with a Ph.D. in molecular virology or a related discipline and up to three years of relevant postdoctoral experience. This individual will help identify and characterize cellular or viral partners that interact with viral gene products. Prior experience with protein-protein interactions and herpesviruses or other large DNA viruses is desired.

A **SENIOR RESEARCH ASSOCIATE** position is available for an experienced Technical Assistant. Candidates will have a B.S. or M.S. degree in molecular biology or a related field and five-plus years of research experience. Facility with herpesviruses, mammalian cell culture, bacterial fusion protein expression, or production and characterization of monoclonal antibodies is useful.

TriBeCa Pharmaceuticals is a growing venture that offers outstanding salary and benefit packages, exceptional advancement opportunity, and an opportunity to live and work in one of the world's most exciting cities. Mail or FAX curriculum vitae and a list of references to the attention of: **Dr. A. Marchini, TriBeCa Pharmaceuticals, 180 Varick Street, Suite 701, New York, NY 10014. FAX: 212-645-2054**.

RESEARCH ASSISTANT PROFESSOR. Molecular microbiology. Molecular identification of pathogenic microorganisms; 12-month renewable position. Collaborate with Public Health Laboratory study of emerging infectious diseases. Requires Ph.D. in microbiology or molecular biology; creative application of molecular methods for rapid identification of microorganisms. Submit statement of research interests, curriculum vitae, and names and contact information for three references to: **Dr. James R. Pratt, ENV, Portland State University, P.O. Box 751, Portland, OR 97207-0751**. Application review begins immediately. Applications should be received by 30 April 1998. Additional information at [website: http://www.esr.pdx.edu](http://www.esr.pdx.edu). *Portland State University is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

POSITIONS OPEN

FOOD SAFETY MICROBIOLOGIST. The Department of Food Science and Nutrition, University of Minnesota, seeks a Food Safety Microbiologist for a 12-month, tenure-track position as **ASSISTANT PROFESSOR**. See [website: http://fscn.chc.umn.edu](http://fscn.chc.umn.edu). *The University of Minnesota is an Equal Opportunity Educator and Employer.*

MEDICAL OFFICER (GS-13/14)

NATIONAL INSTITUTES OF HEALTH National Institute of Allergy and Infectious Diseases

The Division of Allergy, Immunology, and Transplantation (DAIT), NIAID is seeking an outstanding Physician (M.D.) to fill the position of **TRANSPLANTATION SECTION CHIEF** in the Genetics and Transplantation Branch. Incumbent is responsible for formulating the overall Institute research agenda in transplantation immunology, including basic, preclinical, and clinical research and identifying research gaps, needs, and opportunities toward developing optimal therapies to prolong graft survival and prevent rejection. This includes design, implementation, and monitoring of ongoing and future clinical research programs. Section Chief serves as liaison and representative to DAIT-supported clinical trials groups at the steering committee level and is responsible for overall direction of and monitoring of clinical trials. In addition, incumbent serves as a scientific/medical liaison to the Food and Drug Administration and the pharmaceutical co-sponsors. Board-certification in internal medicine, surgery, or pediatrics is required.

Specific qualifications and application procedures apply. For more information contact: **Sue Anderson, Telephone: 301-402-0957; e-mail: sa109m@nih.gov**. Applications must be received by close of business on June 30, 1998.

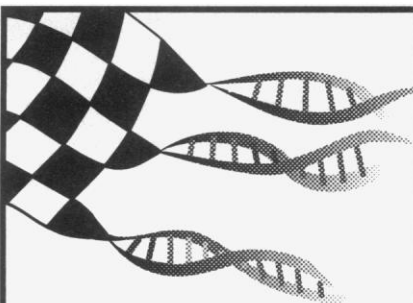
Salary commensurate with expertise and level of accomplishment and will range from \$64,349 to \$90,426. Recruitment bonus/relocation expenses up to 25 percent of base pay and/or a physician's comparability allowance up to \$19,000 per annum may be available. *U.S. citizenship required.*

NIH is an Equal Opportunity Employer.

RESEARCH ASSOCIATE

The Center for Genomic Sciences at the University of Pittsburgh is seeking a highly qualified Scientist to head the Positional Cloning core and participate in the development of new technologies. The Center for Genomic Sciences is a functional genomics group that encompasses both the clinical strengths of the University of Pittsburgh Medical Center and a strong tradition in genetics research. The successful candidate will be responsible for overseeing the positional cloning of genes identified by linkage analysis of simple and complex traits. In addition, the successful candidate will play a central role in the research and development of new technologies to discover the pathophysiologic mechanisms of human disease by utilizing clinical resources, informatics, and new gene detection methods. Qualifications include an M.D. or Ph.D., two to three years of postdoctoral experience, technical and writing skills, and interpersonal skills. The position is a full-time, non-tenure-track, position. Deadline for receipt of applications is June 1, 1998. Applicant should send curriculum vitae, letters from three or more references, and a summary of research interests and future research plans to: **Search Committee, Center for Genomic Sciences, 571 Scaife Hall, 3550 Terrace Street, Pittsburgh, PA 15261. FAX: 412-383-8913**. *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

Division of Cardiology seeks **ASSISTANT or ASSOCIATE PROFESSOR**. The successful candidate will have demonstrated expertise in molecular biology, and will join **Dr. Bolli** and other Investigators to do research focusing on changes in gene expression, gene therapy, and/or transgenesis/gene targeting, as they pertain to myocardial ischemia. Applicants must hold M.D. or Ph.D., have three years of postdoctoral training, and be capable of establishing a strong independent research program. Send curriculum vitae, statement of interests, and three references to: **R. Bolli, M.D., Chief, Division of Cardiology, University of Louisville, Louisville, KY 40292**. *Equal Employment Opportunity/Affirmative Action. PCN 09275.*



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 advance notification about new jobs appearing on SCIENCE Professional Network. If you're looking for a new position, or just testing the market, make Job Alerts part of your search...

- **FAST:** Each week you'll receive e-mail notification about jobs on SCIENCE Professional Network that match your search criteria.
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SCIENCE JOB ALERTS

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

Postdoctoral Positions

Gene Regulation and Early Embryonic Mouse Development

Two NIH-funded postdoctoral positions are available immediately to study either developmentally regulated gene expression (with a focus on hematopoiesis) or cell-cell interactions involved in blood formation and vascular development in the mouse embryo. Our lab is using molecular, embryological, cellular and transgenic mouse approaches to examine regulation of hemoglobin switching and other hematopoietic gene expression, and inductive interactions during early embryogenesis.

**Mount
Sinai**®

A strong background in molecular or developmental biology is required. Preference will be given to applicants with two years or less of previous postdoctoral experience. The laboratory

recently moved from Harvard University and is housed in a new research building with outstanding core facilities and state-of-the-art equipment. Mount Sinai School of Medicine, located on Manhattan's Upper East Side adjacent to Central Park, provides a highly interactive scientific environment. A number of other laboratories have a common interest in developmental biology (including mouse development and gene regulation).

Please send curriculum vitae, summary of research accomplishments and the names of three references to: **Margaret H. Baron, MD, PhD, Department of Medicine and Developmental and Molecular Biology, Mount Sinai School of Medicine, Box 1079, One Gustave L. Levy Place, 11-70B, New York, NY 10029-6574. Phone: 212-824-7420, Fax: 212-849-2442, email: mhbaron@msvax.mssm.edu** We are an equal opportunity employer fostering diversity in the workplace.

The Mount Sinai Medical Center

CARDIOVASCULAR RESEARCH

Position for a Senior Scientist at Meharry Medical College

Applications are invited for an experienced investigator to develop a research group focused on cardiovascular disease at Meharry Medical College. The individual filling this position must be an established investigator who has received competitive research support, who has leadership ability, and who can recruit and develop faculty into an interactive team of investigators studying cardiovascular disease. The successful candidate will create and direct the Cardiovascular Research Program (CRP), a multidisciplinary, interdepartmental activity that unifies and expands the college's research projects in cardiovascular disease; enhances graduate education, and faculty development; and achieves national prominence in cardiovascular research at Meharry. The CRP director will be expected to encourage collaborative research and training relationships among faculty at Meharry, Vanderbilt University, and the University of Alabama at Birmingham where current collaborations exist. The director will also seek funds to strengthen the research enterprise, and will attract other researchers, encourage others to submit research and training grant applications and serve as a mentor to developing faculty.

Applicants considered for the position must have the M.D. and/or Ph.D. degree and qualify for a position in one of the basic or clinical departments at the level of associate professor or professor.

Meharry Medical College is a historically black health science center. It enrolls approximately 850 students in programs leading to the M.D., D.D.S., M.S.P.H., and Ph.D. degrees. Current cardiovascular research include studies of the molecular mechanisms of fibroproliferative disease; genetic, clinical, and epidemiological bases of hypertension; basic and clinical aspects of sickle cell disease; the role of infection in the pathogenesis of cardiovascular disease; and behavioral, preventive, and outcomes studies of cardiovascular diseases. Meharry's commitment to training students from underrepresented groups is expressed in its mission statement.

Applicants are asked to submit a curriculum vitae, a description of research interest, and three letters of reference to **Fred Jones, Ph.D., Chairman, Recruitment Committee, School of Graduate Studies, Meharry Medical College, Nashville, TN 37208**. Applications must be received no later than June 1, 1998.

Meharry Medical College is an Equal Opportunity, Affirmative Action Employer. Women and members of underrepresented minority groups are especially encouraged to apply.

POSITIONS OPEN

HEAD OF PRODUCT/PROCESS DEVELOPMENT

MALARIA VACCINE DEVELOPMENT UNIT Full-Time Position: Total Compensation Up To \$136,700 Dependent on Experience

The New Malaria Vaccines Development Unit (MVDU) of the Laboratory of Parasitic Diseases (LPD) seeks a highly experienced Engineer or Ph.D. (or M.D.) scientist who will have responsibility for the operation of Product/Process Development component of the Unit. The Unit will manufacture malaria vaccine products for preclinical and clinical testing. In addition to coordinating the Expression/Production, Product Recovery, and Process Support teams, the incumbent will perform product and process research relevant to malaria vaccine development. The facility will be an integral part of a broader international malaria vaccine program and part of the new NIAID Malaria Vaccine Initiative. Interested persons may contact: **Dr. David Kaslow, Head, Malaria Vaccine Development Unit, Laboratory of Parasitic Diseases, Telephone: 301-496-3655; e-mail: dkaslow@nih.gov** for additional information about the position. A curriculum vitae, bibliography, and three letters of reference, and a detailed statement of experiences in product and process development of clinical-grade recombinant proteins must be postmarked by May 15, 1998, to: **Ms. Audrey Davis, OHRM, NIAID, Building 31, Room 7A27, 31 Center Drive, MSC 2520 Bethesda, MD 20892-2520.** Contact **Ms. Davis** for a copy of vacancy announcement number AI-98-029. *The NIH is an Equal Opportunity Employer.*

One-year, full-time **TEACHING/LEAVE REPLACEMENT** position in the Fisheries Department; requires Ph.D. or near completion, with expertise in quantitative fishery management. Instruction in general area of population dynamics/commercial fisheries management, plus introductory statistics; prior college teaching given preference. Rank and salary dependent on candidate's qualifications and experience. Starting date 19 August 1998. Submit curriculum vitae, transcripts of academic work, and three letters of recommendation to: **David Hankin, Chair, Department of Fisheries, Humboldt State University, Arcata, CA 95521-8299. Telephone: 707-826-3953; FAX: 707-826-4060; e-mail: dgh1@axe.humboldt.edu.** Closing date is 10 May 1998 or until position is filled. *Humboldt State is an Equal Opportunity/Affirmative Action/Title IX Employer.*

PART-TIME MICROSCOPE SALES/SCIENTISTS

Manufacturer of a new, high-resolution optical 3-D microscope seeks Microscopists with discretionary time interested in supplementing income through equipment sales and application development. Ideal candidate will continue to perform research in a discipline benefiting from 3-D analysis. Compensation based on ability to develop and publish new applications for technology and to assist in sales of microscopes to other scientists.

Send résumé to:

**InGen Corporation
235 Montgomery Street
Suite 300
San Francisco, CA 94104**

VISITING ASSISTANT PROFESSOR of biology, one-year, full-time (five courses) to include introductory cell biology, anatomy, and a non-majors course. Knox College is a selective liberal arts college of about 1,200 undergraduates and operates on a trimester system. Candidates should submit a curriculum vitae along with three letters of recommendation by April 27, 1998, to: **Dr. Linda Dybas, Biology Department, Knox College, Galesburg, IL 61401. Telephone: 309-341-7352; e-mail: ldybas@knox.edu; FAX: 309-341-7718.** *In keeping with the College's 161-year commitment to equal rights, Knox welcomes applications from members of underrepresented groups.*

Administrative position. **HEAD, DEPARTMENT OF BIOMEDICAL SCIENCES** at the Oregon State University College of Veterinary Medicine. The departmental faculty have academic, research, and service responsibilities in anatomy, physiology, microbiology, pathology, and toxicology. Ph.D. required; preference given for the D.V.M. Demonstrated abilities in extramurally funded research, budget management, and leadership required. For information: **Telephone: 541-737-2098; e-mail: rarickd@ccmail.orst.edu.** Application deadline is June 15, 1998. *Oregon State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



The **VISITING FACULTY** openings require a Ph.D. and/or M.D. with teaching experience in the appropriate discipline:

May 1st to May 29th, 1988: neuroanatomy; June 3rd to July 1st, 1998: biochemistry; June 3rd to July 1st, 1998: pathology.

The salary for the four weeks period is US \$4,000.00 with round trip and accommodation in one of our guest houses at the campus.

Send curriculum vitae to:

**The Search Committee
University of Health Sciences Antigua
School of Medicine
Dowhill Campus, Box 510
St. John's, Antigua
Telephone: 268-461-1391
FAX: 268-460-1477**

CARL T. HAYDEN VA MEDICAL CENTER PHOENIX, ARIZONA

OPEN RANK. Ph.D./Basic Scientist sought for hard-money academic position in a new research program at Phoenix VA Medical Center (a Dean's Committee Hospital of the University of Arizona College of Medicine). Cellular, biochemical, and/or molecular genetic skills are required. Primary focus of the program is lipids/diabetes/atherosclerosis. Collaborative possibilities include nearby NIH/Phoenix. Contact: **Eliot Brinton, M.D., Chief, Endocrinology, Telephone: 602-200-6059; FAX: 602-200-6004; e-mail: eliot.brinton@med.va.gov.** *An Equal Opportunity Employer.*

GENETICS

A one-year **SABBATICAL REPLACEMENT POSITION** in genetics is available August 1998. Teaching duties include introductory genetics, non-majors courses in biotechnology and in human genetics, and directing student research projects. Excellent teaching and research facilities are available. Evidence of excellence in teaching and research, and a commitment to liberal arts education is expected. Send curriculum vitae, statements of teaching and research interests, and three reference letters to: **Dr. Glen Wurst, Biology Department, Allegheny College, Meadville, PA 16335.** *Women and minorities are strongly encouraged to apply. Allegheny is an Equal Opportunity Employer.*

BUSINESS MANAGER. Scientific association seeks person to administer business office; manage annual meeting; oversee budget, fund-raising, publishing, membership records, and marketing; assist Board of Directors and committees; act as liaison to other societies. Requires Bachelor's degree, especially business or marketing. Trade association experience, superior oral and written communication, experience coordinating multiple groups, and knowledge of budgets are desirable. Send a cover letter, résumé, and the names and addresses of three references to: **Business Manager Committee, Federation of Animal Sciences, 1111 North Dunlap Avenue, Savoy, IL 61874.** Deadline: April 15, 1998, or until filled.

POSTDOCTORAL POSITION available immediately to study the molecular genetics of *Helicobacter*/arthropod interactions with the goal of developing strategies for the genetic manipulation of insect disease vectors. Experience in bacterial molecular genetics and/or molecular entomology required. Send curriculum vitae and names of three references to: **Scott O'Neill, Department of Epidemiology and Public Health, Yale University School of Medicine, 60 College Street, New Haven, CT 06520. E-mail: scott.oneill@yale.edu.**

POSTDOCTORAL POSITION to study small GTPases in cell signaling. Positions available to investigate actions of Rho GTPases and effectors in regulation of the actin cytoskeleton, apoptosis, and leukocyte function. Applicants with experience in apoptosis, kinases, lipid signaling, the cytoskeleton, and/or leukocyte biology are encouraged to apply: **Gary M. Bokoch, Ph.D., The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037 USA. FAX: 1-619-784-8218; e-mail: bokoch@scripps.edu.**

POSITIONS OPEN

Rigel, Inc. is a rapidly growing biotechnology company located in the San Francisco Bay Area focusing on high-throughput genetic screening to map complex cellular functional pathways in the areas of signal transduction linked to the production of immunoglobulins, mast cell exocytosis, and apoptotic mechanisms in tumor cells. Rigel's goal is rapid target validation and the development of small molecule therapeutics for inflammation and cancer. Rigel's proprietary functional genomics database provides valuable leads to novel cellular pathways.

We are looking for several aggressive **POSTDOCTORAL CANDIDATES** to begin in the fall of 1998, who possess a strong publication record in the areas of molecular biology, cell biology, or protein biochemistry. Skills in one or more of the following fields are desired: expression vector design, coimmunoprecipitation, flow cytometry, enzymatic assay development, mammalian cell culture, gene knockouts, and retroviral research. Prior experience with 2D-gels and mass spectrometry useful. Excellent motivation and teamwork skills are essential.

Individuals are expected to work closely with Senior Scientists to analyze novel targets in Rigel's functional pathway database and will be encouraged to publish. Rigel offers competitive salaries, benefits, and equity participation.

Please send letter of inquiry and curriculum vitae to: **Human Resources, JOB CODE # PD3-98-SC, Rigel, Inc., 772 Lucerne Drive, Sunnyvale, CA 94086. FAX: 408-736-1588. Website: www.rigelinc.com.** *Equal Opportunity Employer.*

INTERNIST ASSISTANT CHIEF OF SERVICE

University Hospital of Lausanne, Department of Internal Medicine, Medical Service A, seeks an Internist as Assistant Chief of Service (médecin adjoint, leitender Arzt) (tenure position) for clinical supervision of the chief residents of its wards of internal medicine, pre- and post-graduate teaching, personal research (fundamental or clinical), and participation in ongoing research programs. All subdisciplines of internal medicine will be considered. Beginning of the position: October 1998 or later. Applications will be accepted until position is filled. Letter of application, curriculum vitae, research interests, and letters of reference to: **P. Burckhardt, M.D., Professor of Medicine, University Hospital—CHUV 1011 Lausanne, Switzerland. Telephone: 41-21-3140870; FAX: 41-21-3140871.**

POSTDOCTORAL POSITION IN LIGHT-INITIATED SIGNAL TRANSDUCTION

Position available to study the structure and function of blue-light photoreceptors in humans. Experience in eukaryotic molecular biology is necessary. Recent Ph.D.'s with training in signal transduction, promoter analysis, and *in vivo* and *in vitro* assays for gene expression are encouraged to apply. Please send curriculum vitae and names of three referees to: **Dr. Aziz Sancar, Department of Biochemistry and Biophysics, University of North Carolina at Chapel Hill, School of Medicine, Chapel Hill, NC 27599-7260.** *Equal Opportunity/Affirmative Action/Employer.*

RESEARCH ASSOCIATE in vascular pharmacology available for recent Ph.D. in pharmacology or physiology. Project related to pharmacology of purine receptors and the involvement of second messenger systems in vascular smooth muscle and endothelial cells. Salary commensurate with experience. Experience in pulmonary physiology preferred. Send curriculum vitae and three letters of recommendation to: **Dr. S. Jamal Mustafa, Department of Pharmacology, East Carolina University, Greenville, NC 27858. Telephone: 919-816-2736.** *Affirmative Action/Equal Employment Opportunity. Accommodates individuals with disability. Applicants must comply with the Immigration Reform and Control Act.*

POSTDOCTORAL POSITION in bone research available immediately to work on *in vivo* effects of growth factors, diet, and exercise on calcium and bone metabolism in rodent models. Ph.D. with experience in bone morphometric analysis, biochemical and molecular techniques desirable. Send a curriculum vitae and letter detailing experience and have three letters of recommendation sent to: **Dike N. Kalu, Ph.D., Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. E-mail: kalu@uthscsa.edu.**

The University of Texas Health Science Center at San Antonio is an Affirmative Action/Equal Opportunity Employer.

**UNIVERSITY OF CALIFORNIA,
BERKELEY**
**Department of Materials Science and
Mineral Engineering**

The College of Engineering at the University of California, Berkeley invites applicants for a tenure-track position in Biomaterials with expertise in the response of tissues to engineering materials. The preferred candidate will utilize the Advanced Light Source at the Lawrence Berkeley National Laboratory as part of his/her experimental investigations of the biological and chemical processes occurring at the interfaces between tissues and bioengineering devices. Preference will be given to an appointment at a tenured level, although appointment at the Assistant Professor level will be considered for a recent Ph.D. recipient with exceptionally strong promise.

Appointment in any department within the College of Engineering is possible. An appointment partially within the Department of Materials Science and Mineral Engineering is likely. The successful candidate will be responsible for teaching undergraduate and graduate courses in the College and must engage in high quality research. A doctoral degree in an appropriate field is required. The position is available in the Spring Semester of 1999.

Interested persons should apply (include résumé, statement of interest, copies of publications, names and addresses of references), by June 1, 1998, to:

Professor Thomas M. Devine, Chair
Department of Materials Science and Mineral Engineering
577 Evans Hall #1760
University of California
Berkeley, CA 94720-1760
Phone: (510) 642-3801
E-mail: devine@socrates.berkeley.edu

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



DIRECTOR
Division of Cardiology

Vanderbilt University Medical Center seeks a distinguished physician scientist to lead the Division of Cardiology in the Department of Medicine. The Chief should have an M.D. or M.D./Ph.D. degree and compiled a record of outstanding research achievements in order to be appointed to an endowed chair at the level of Associate Professor or Professor of Medicine with tenure. He/She will be expected to lead a major research initiative in state-of-the-art laboratory space; develop multidisciplinary academic programs; lead a well-established fellowship training program; participate in the management of the Vanderbilt Heart Institute; as well as contribute to clinical program development at Vanderbilt University Hospital, the Veterans Administration Medical Center on campus, as well as in new outreach locations. The Chief will also be expected to recruit new faculty who can further enhance Vanderbilt's strong national presence in clinical cardiovascular medicine. Send letters of interest and CV to: **Eric G. Neilson, M.D., Chair, Cardiology Search Committee, Department of Medicine, D-3100 MCN, Vanderbilt University Medical Center, Nashville, TN 37232-2358.**

VANDERBILT UNIVERSITY
Medical Center

Vanderbilt is an Equal Opportunity/Affirmative Action Employer.

Microbiology Specialist

Lonza Inc., a multinational leader in the specialty chemical industry, has an immediate opening for a Microbiology Specialist at our Research Center located in Clinton, New Jersey.

We are seeking an individual with specialized knowledge and skill to increase the productivity and efficiency of traditional efficacy screening methods.

You will be responsible for the development, implementation and validation of high throughput methodology for screening new chemical entities for microbicidal activity. In this capacity you will identify, investigate and implement methods or method improvements which will support the synthesis of new antimicrobial compounds.

The successful candidate must have a Ph.D in Microbiology or related biological sciences with 5-7 years of related experience in efficacy screening of pharmaceutical agents, fungicides, bactericides, agricultural chemicals or industrial biocides using conventional and rapid screening testing methods. Experience with automation, robotics, and high throughput screening methods would be an advantage. Superb leadership and communication skills are required. Industrial experience is preferred.

Lonza Inc. offers a competitive starting salary along with a comprehensive benefits package. Please submit your resume with salary history to:

Manager, Human Resources
LONZA Inc.

Corporate headquarters
17-17 Route 208, Fair Lawn, NJ 07410

Local interviews will be conducted at our Research and Development facility.

LONZA



IDEC Pharmaceuticals Corporation is a leader in the development of immunologically active monoclonal antibodies and other biologics for therapeutic application to cancer and autoimmune disorders. We pride ourselves in the excellence of our team members and invite you to join us. We currently offer the following opportunities:

POSTDOCTORAL FELLOW
Molecular Biology

This position will focus on utilizing molecular biology technologies to identify antigen targets and human monoclonal antibodies for cancer therapy. Qualified candidates will have a PhD in Molecular Biology, Immunology or related field, with significant experience in genetic engineering and immunology. This is a 2-year assignment with the possibility of extension.

At IDEC Pharmaceuticals, you will find a highly stimulating environment where you will have the opportunity to develop and expand your skills. We offer a comprehensive, competitive benefits package. For immediate consideration, please send your resume and salary history to: IDEC Pharmaceuticals Corporation, 11011 Torreyana Rd., San Diego, CA 92121. Or fax to: (619) 550-8753. EOE. NASDAQ/IDPH

IDEC
Pharmaceuticals Corporation

POSITIONS OPEN

POSTDOCTORAL AND TECHNICIAN POSITIONS

The Beckman Research Institute
City of Hope National Medical Center
Division of Molecular Medicine

Molecular psychiatry, Postdoctoral Fellowship/Senior Postdoctoral Fellowship. The project utilizes automation and rapid new PCR-based methods to search for genetic predisposition to schizophrenia and other mental illnesses by utilizing VAPSE-based candidate gene analysis (reviewed in *Genomics* 12:1-6, 1992). Potential for scientific productivity is more important than experience in psychiatric genetics or molecular biology.

Methodology development, Postdoctoral Fellowship/Senior Technician. Utilizing microfabrication and automation, develop a "third generation" method for detecting unknown mutations. Project will also focus on developing a method for measuring mutational load in humans.

Molecular epidemiology of the mutational process in humans, Postdoctoral Fellowship. Research will focus on utilizing the p53 gene as a "mutagen test" by analyzing cancer samples. Studies include utilizing hemophilia A and B as models for human germline mutation.

Candidates should send résumé to: City of Hope National Medical Center and Beckman Research Institute, Attn: Shelley Tam, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 626-301-8448; e-mail: stam@smtpink.co.hop. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Three Postdoctoral positions are available in the neuroanatomy laboratory of the Neurology Department at The Mount Sinai Medical Center in New York City. One position involves participation in studies of neurotransmitter, receptor, and transporter localization in defined circuits of the mammalian central vestibular system. The candidate selected for the second position will conduct studies concerning the subcellular localization of nitric oxide-related markers in the central vestibular system of rats in altered gravitational environments. The third Fellow will carry out detailed axonal reconstructions and ultrastructural studies of the peripheral vestibular system of the toadfish. All projects are supported by NIH of NASA. Experience with light, electron, and/or confocal microscopy, immunocytochemistry, fluorescence histochemistry, and hybridoma technology is desirable.

Interested applicants should send a curriculum vitae, three letters of recommendation, and a statement identifying the position of interest, to: Dr. Gay Holstein, Box 1140, Department of Neurology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer fostering diversity in the workplace.

POSTDOCTORAL POSITIONS

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

POSTDOCTORAL POSITION available to investigate the role of transcription factors in development and malformations of nervous system in transgenic mice (*J. Biol. Chem.* 272:25112, 1997). Experience in cell and molecular biology or neuroscience required. Dr. Claudia Kappen, Department of Biochemistry and Molecular Biology, Mayo Clinic Arizona, 13400 East Shea Boulevard, Scottsdale, AZ 85259 USA. E-mail: kappen@mayo.edu. Mayo Clinic Arizona is an Affirmative Action Employer and Educator.

An immediate opening is available for one **POSTDOCTORAL FELLOW** to conduct research in the area of HIV pathogenesis. A strong background in molecular and cell biology is necessary. Applicants should send curriculum vitae, and names of three references to: Grace Aldrovandi, M.D., University of Alabama at Birmingham, 1600 7th Avenue South, ACC, Suite 504, Birmingham, AL 35233. E-mail: geopeland@peds.uab.edu.

POSITIONS OPEN

POSTDOCTORAL FELLOW HUMAN ANATOMY

The Department of Anatomy is seeking a Postdoctoral Fellow to participate in teaching medical gross anatomy/embryology and to contribute to the research program of the department. Applicants should have an active research program in morphological aspects of mammalian evolution and experience teaching dissection-based human gross anatomy. Applicants who can complement existing research programs in the department are especially encouraged to apply (faculty include D. E. Dluzen, E. R. Dumont, J. G. M. Thewissen, S. C. Ward). Ph.D. must be completed by September 1, 1998. Salary is \$25,000 plus full benefits and travel allowance. Northeastern Ohio Universities College of Medicine is part of a consortium that includes Kent State University, The University of Akron, and Youngstown State University. Applications consisting of a cover letter stating research interests, curriculum vitae, and three letters of recommendation should be sent by June 15, 1998, to: Office of Human Resources, c/o Steven Ward, Northeastern Ohio Universities College of Medicine, 4209 State Route 44, P.O. Box 95, Rootstown, OH 44272-0095. We take Affirmative Action toward Equal Employment Opportunity.

POSTDOCTORAL POSITION CARDIAC ION CHANNEL BIOLOGY

A Postdoctoral position (two to three years) is available in the Department of Pharmacology (Division of Clinical Pharmacology). The projects use molecular and electrophysiological techniques to study regulation of expression of cardiac ion channels. Experiments include cloning new cDNAs, and studies of channel function and regulation in cultured cells, cardiac tissue, and wild-type and genetically modified animals that the laboratory is generating. Please send curriculum vitae and names of three references to: Dan Roden, M.D., MRB532C, Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, TN 37232. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITIONS in the field of developmental genetics are available in state-of-the-art laboratories at Northwestern University Medical School. Send application letter, three references, and curriculum vitae to:

Dr. Philip M. Iannaccone, M.D., Ph.D.
Children's Memorial Institute for
Education and Research, Box 204
Northwestern University Medical School
and Children's Memorial Hospital
Chicago, IL 60614 USA

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION

Experienced in single photon-laser fluorometry: protein-protein and lipid-protein interactions, reconstitution in liposomes, membrane domains in cell transformation and cycle. Send curriculum vitae, publications, three recommendations. Contact: Prof. Parola and Dr. Pines, Chemistry Department, Ben Gurion University, Beer Sheva, Israel. FAX: 972-764-72943; e-mail: aparola@bgumail.bgu.ac.il.

GENETICS

POSTDOCTORAL RESEARCH FELLOW

Ph.D. in biologic sciences to apply human genetic techniques to the study of eye diseases at Harvard. Interested candidates, please send résumé to: Massachusetts Eye and Ear Infirmary, Epi Unit, 3rd floor, 243 Charles Street, Boston, MA 02114. E-mail: cjhegenber@mei.harvard.edu in ASCII text; FAX: 617-573-3570.

POSTDOCTORAL POSITIONS

Available immediately to study signal transduction of a transmembrane glycoprotein recently cloned. Funded by a NIH grant. Experience in protein purification and signal transduction highly preferred. Send a résumé and names of three references to: K. C. Kim, Ph.D., University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201. FAX: 410-706-0346; e-mail: kkim@umaryland.edu.

POSITIONS OPEN

THERAPEUTIC APPLICATIONS OF BASIC IMMUNOBIOLOGY

The Department of Microbiology and Immunology at the University of North Carolina invites applications for five **POSTDOCTORAL ASSOCIATES** to join our ongoing multidisciplinary program in immunotherapeutics and vaccine development. Areas of current research include: peptide-pulsed dendritic cell therapy; structure-based peptide design; viral- and DNA-based vaccines. Application is toward autoimmune disease, cancer, and various viral targets including HIV.

Jeffrey Frelinger: Experience in cellular immunology, immunogenetics, antigen processing, or animal virology required.

Edward Collins: Candidates should have a proven record in biochemistry and/or protein crystallography.

Roland Tisch: Individuals with experience in molecular biology, virology, or cellular immunology are being sought.

Jon Serody: Individuals with experience in mammalian cell tissue culture, molecular biology, and cellular immunology are being sought.

All applicants should have excellent written and verbal communication skills. Please direct inquiries to an above named individual with curriculum vitae and names of three references: Department of Microbiology and Immunology, University of North Carolina, CB#7290, 804 M. E. Jones Building, Chapel Hill, NC 27510-7290. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Positions available (Ph.D. or M.D.) for research training in experimental hematology and vascular biology in an NIH-sponsored program at the Cardeza Foundation, Thomas Jefferson University. Areas of interest include: molecular and cellular aspects of angiogenesis, gene expression by vascular cells, biology of the platelet and endothelial GpIb complexes, megakaryocytic development and gene expression, oxygen-regulated gene expression, role of lipid-binding proteins in thrombosis, and bone marrow transplantation immunology. U.S. citizenship or permanent residency required. Please send curriculum vitae and three reference letters to: Dr. Sandor S. Shapiro, Cardeza Foundation for Hematologic Research, 1015 Walnut Street, Philadelphia, PA 19107-5099, or e-mail: sananto@jefflin.tju.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION available in a collaborative research group to study the cellular mechanisms underlying the acute and chronic actions of opiates and cocaine on mammalian neurons. Projects focus on neurotransmitter receptors and signal transduction mechanisms using intracellular and whole-cell patch clamping techniques in brain slices. Experience with *in vitro* electrophysiological techniques desirable. M.D. or Ph.D. Send curriculum vitae and names of three references to: Dr. Meenakshi Alreja, Department of Psychiatry, CMHC 306, Yale University School of Medicine, 34 Park Street, New Haven, CT 06508. Telephone: 203-789-7447; FAX: 203-562-7079; e-mail: meenakshi.alreja@yale.edu.

POSTDOCTORAL POSITIONS available immediately to study and manipulate mammalian signal transduction pathways. Candidates must have demonstrated expertise in one of the following areas: protein biochemistry, combinatorial or synthetic chemistry, signal transduction, and yeast genetics. Send research interests, curriculum vitae, and three references to: C. Wilson Xu, Ph.D., Box 362, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. E-mail: xu@frodo.mgh.harvard.edu.

Memorial Sloan-Kettering Cancer Center is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study modulation of voltage-gated ion channels by general anesthetics. Ph.D. in physiology or biophysics preferred. Candidates must have experience in electrophysiology. Experience in channel modulation and/or molecular biology is desirable. Send curriculum vitae, cover letter, and three references to: Dr. Ana M. Correa, UCLA, Department of Anesthesiology, BH-612 CHS, Box 951778, Los Angeles, CA 90095-1778. FAX: 1-310-794-6678.



POSTDOCTORAL RESEARCH POSITIONS in INTERNATIONAL HIV RESEARCH PROGRAM

The Henry M. Jackson Foundation, in cooperation with the Division of Retrovirology, Walter Reed Army Institute of Research, is seeking qualified applicants for Postdoctoral positions in two areas: Area 1) An internationally recognized program in the genetic variation and epidemiology of HIV-1, led by **Dr. Francine E. McCutchan**, is seeking applicants with a Ph.D. in Molecular Biology or Microbiology/Virology or with an M.D. and laboratory research experience for projects in HIV-1 variation using PCR, molecular cloning, automated DNA sequencing, and phylogenetic analyses on microcomputers. Work will be conducted in small, intensive molecular evolution group within a comprehensive HIV-1 vaccine development program. Area 2) The Virology/Pathology laboratory of **Dr. John Mascola** and **Dr. Sarah Frankel** is a highly collaborative, multidisciplinary component of the HIV-1 vaccine research program and performs animal model and *in vitro* studies on the role of antibody in protection against HIV and on the interaction of HIV at mucosal surfaces, with emphasis on the role of dendritic cells. The candidate should have a Ph.D. in Immunology or Virology and extensive experience with cell culture techniques.

Salary commensurate with experience. Please send résumés to:

Human Resources Department

Area 1) Attn: **PL4980058**

Area 2) Attn: **PL4970453**

**The Henry M. Jackson Foundation
for the Advancement of Military Medicine
1401 Rockville Pike, Rockville, MD 20852
or e-mail at: hr@mail.hjf.org
AA/EOE**



UNIVERSITY OF PENNSYLVANIA VIROLOGY

The Department of Microbiology, University of Pennsylvania School of Medicine invites applications for tenure-track positions at the Assistant Professor level. Candidates should have outstanding credentials in the field of virology. Major responsibilities will include supervision of an active research program and teaching virology to graduate and medical students. Applicants should submit a curriculum vitae, summary of research accomplishments, description of future plans and three letters of reference by May 8, 1998 to:



**Dr. Nigel Fraser, Chair
Virology Search Committee
Department of Microbiology
University of Pennsylvania
225 Johnson Pavilion
3610 Hamilton Walk
Philadelphia, PA 19104-6076**

Letters should be marked **"VIROLOGY SEARCH."**

We encourage e-mail applications to

fraser@wista.wistar.upenn.edu

Web Site Address: www.med.upenn.edu/micro/

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SYMPOSIUM

Research at the Biology/Chemistry Interface The 4th Michigan Symposium on Contemporary Challenges in Molecular Medicine



**Hirschmann
Wender
Schreiber
Myers**

**May 8, 1998, 9 am - 4 pm
1800 Chemistry Building
University of Michigan
Ann Arbor, MI**

No Registration, Reservations or Fees Required

Additional Information:

<http://www.woster@wizard.pharm.wayne.edu>

<http://www.annarbor.org/tourism/tourism.html>

contact: Dr. Hollis Showalter, Chemistry Department; showalh@aa.wl.com
Parke-Davis Pharmaceutical Research, Ann Arbor, MI 49105, (734) 622-7028



University of Alabama at Birmingham Assistant Professor - Virology

A tenure-track faculty position in Virology is available in the Department of Microbiology. We are seeking candidates with a strong research record, a commitment to developing an independent, innovative, funded, research program, and a concerned interest in graduate and medical education. This University, ranked in the top 20 institutions in NIH-funded research, offers an unusually interactive environment. The presence of several multi-disciplinary Centers and an inter-departmental graduate program in Cell and Molecular Biology facilitates collaborations among the basic science disciplines and between basic science and clinical faculty. The Virology faculty are based in the Departments of Microbiology, Biochemistry, Medicine and Pediatrics and current research programs include virus structure, replication mechanisms, assembly, immune recognition, protein structure and function, viral vectors, the interferon system, and the development of vaccines and antiviral drugs. These studies focus on murine and avian retroviruses, lentiviruses including HIV and SIV (P. Fultz, B. Hahn, E. Hunter, J. Kappes, C. Klug, C. Morrow, M. Mulligan, G. Shaw), influenza and caliciviruses (M. Luo), picornaviruses (M. Luo, C. Morrow), rhabdo- and paramyxoviruses (G. Wertz, W. Sullender, A. Ball), nodaviruses and vaccinia virus (A. Ball), adenoviruses (J. Engler), papilloma viruses (T. Broker, L. Chow), herpesviruses (W. Britt, R. Whitley), and structural studies of bacteriophage assembly (P. Prevelige) and components of the interferon system (M. Walter). The successful applicant could provide expertise in a new area or extend one of the existing programs. Applications will be accepted through May 31, 1998 or until the position is filled, and should include a curriculum vitae, a brief description of past accomplishments and future research plans, and the names and addresses of three references. Applications, nominations or inquiries should be sent to one of the co-chairs of the Search Committee:

**Dr. Andrew Ball or Dr. Eric Hunter,
Department of Microbiology,
University of Alabama at Birmingham,
Birmingham AL 35294.
Telephone (205) 934-0864
<http://www.microbio.uab.edu>**

UAB is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Postdoctoral position available to study the molecular mechanisms of eukaryotic growth and differentiation. The NIH-funded projects focus on (1) the downstream targets of the early N-glycosylation genes, including G1 cyclins and actin-associated proteins using yeast, zebrafish, and transgenic mice; (2) molecular mechanisms of apoptosis during mouse salivary gland biogenesis; and (3) characterization and function of adhesive complexes during mouse salivary gland growth and differentiation. Studies involve *in vivo* and *in vitro* genetic, molecular, and cell biological approaches as applied to cell cycle regulation and signal transduction pathways. Experience in organ/tissue culture, molecular and cell biological techniques required.

Send curriculum vitae to: **Dr. Maria Kukuruzinska, Department of Oral Biology and Periodontology, Boston University Medical Campus, 715 Albany Street, Boston, MA 02118.**

Boston University is an Affirmative Action Employer.

POSTDOCTORAL POSITION IN MITOCHONDRIAL MOLECULAR BIOLOGY

University of North Carolina-Chapel Hill

A Postdoctoral position is available to start immediately to study the initiation of protein synthesis in mammalian mitochondria. The goal of this work is to understand how the initiation complex is assembled; to identify features of the mRNA that are important for initiation; to examine the role of mRNA specific binding proteins in initiation; and to examine the role of the mitochondrial inner membrane on the initiation process. Individuals with experience in molecular biology and enzymology are encouraged to apply. Please send curriculum vitae and the names of three references to: **Linda Sprenulli, Department of Chemistry CB # 3290, University of North Carolina, Chapel Hill, NC 27599. E-mail: linda_sprenulli@unc.edu.**

POSTDOCTORAL FELLOW AND RESEARCH ASSISTANT FOR PROTEIN CHEMISTS

The Institute of Molecular Medicine for the Prevention of Human Diseases of the University of Texas-Houston Health Science Center is establishing a new Research Center of Protein Chemistry. Several positions are available for enthusiastic scientists. Candidates with experience in peptide and protein chemistry, mass spectrometry (ES or MALDI), or informatics are encouraged to apply. Please submit your application (curriculum vitae, publication list, and names of references) to the following address: **Jason Bradshaw, Institute of Molecular Medicine, 2121 West Holcombe Boulevard, Houston, TX 77030 USA. FAX: 713-500-2420. The University of Texas is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

DEPARTMENT OF BIOLOGICAL SCIENCES

Tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** in phytochemistry/plant natural products. Position effective 1 September 1998. Teach undergraduate biochemistry, graduate phytochemistry, plant natural products, medicinal botany, and ethnobotany. Fully equipped research laboratory including HPLC/MS and GC/MS. Ph.D. in appropriate area required and a strong commitment to teaching and research. Postdoctoral and teaching experience preferred. Maintain a productive research program. Salary range: \$29,931 to \$62,394 per qualifications and experience. Send curriculum vitae, reprints, and related materials by May 13, 1998, to: **Dr. Thomas E. Jensen, Professor and Chairman, Department of Biological Sciences, Lehman College, City University of New York, Bronx, NY 10468-1589. Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP available in tissue engineering for a candidate with experience in studies of growth factor implant studies for repairing skeletal defects. Salary and benefits are competitive; position has potential for being long-term. Send cover letter and curriculum vitae and names of three references to: **Mr. Jeff Meyer, Mineral Metabolism Laboratory, P.O. Box 7210, Loma Linda, CA 92354.**

POSITIONS OPEN

POSTDOCTORAL POSITION available June 1998 or later at the National Institutes of Health in Phoenix, Arizona to identify and characterize susceptibility genes for type 2 diabetes and its predictors. Experience in molecular biology required; in cell culture and biochemistry desirable. Send curriculum vitae, summary of relevant experience, and list of references to: **Dr. Paska Permana, Clinical Diabetes and Nutrition Section, NIDDK, NIH, 4212 North 16th Street, Phoenix, AZ 85016. FAX: 602-200-5335.**

PULMONARY, ALLERGY, AND CRITICAL CARE MEDICINE

The University of Pittsburgh Medical Center (UPMC) and the University of Pittsburgh School of Medicine are seeking a Chief for the Division of Pulmonary, Allergy, and Critical Care Medicine in the Department of Medicine. The Division has a tradition of excellence in basic research and clinical activities of the Division. It has an NIH-funded training grant. The Search Committee seeks a nationally recognized Pulmonary/Critical Care Physician Scientist with an established record of achievement in research who can foster continued growth in the funded research and clinical activities of the Division. The Division Chief will also be responsible for overseeing the Division's teaching programs as well as its growing clinical programs.

The UPMC, highly ranked nationally as an academic medical center, is committed to providing the resources necessary to accomplish the goals of the Division, including support for the recruitment of additional faculty.

Interested applicants should send a curriculum vitae with cover letter to:

**Andrew F. Stewart, M.D.,
Chair, Pulmonary Search Committee
University of Pittsburgh Medical Center
Division of Endocrinology
E-1140 Biomedical Science Tower
200 Lothrop Street
Pittsburgh, PA 15213**

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

POSTDOCTORAL FELLOW. Applications are invited for two immediate Postdoctoral Fellowships to study hematopoietic stem cell genetics and cancer gene therapy. Candidates with a Ph.D. degree in biochemistry, genetics, or molecular biology are preferred. Please submit a curriculum vitae and the names of three references to: **Michael F. Clarke, University of Michigan Medical School, Department of Internal Medicine and Molecular and Cellular Biology, 1500 East Medical Center Drive, 4-310 CCGC, Ann Arbor, MI 48109-0936. FAX: 313-763-4226. An Affirmative Action/Equal Opportunity Employer.**

COURSES & TRAINING

NEURAL DEVELOPMENT AND GENETICS OF ZEBRAFISH

August 16-28, 1998, Marine Biological Laboratory, Woods Hole, Massachusetts

An intensive lecture/laboratory course for advanced graduate and medical students, Postdoctoral and Clinical Fellows, and beginning Independent Investigators. Topics will include developmental stages of zebrafish, chemical and insertional mutagenesis, early development, organogenesis and zebrafish husbandry, the nervous system, its development, and the analysis of nervous system mutants. Laboratory exercises will introduce students to developing wild-type and mutant embryos, techniques of nucleic acid injection, cell transplantation, *in situ* hybridization, labeling of single cells, behavioral testing of wild-type and mutant animals, and axonal pathfinding techniques. Directors: **John Dowling, Harvard University** and **Nancy Hopkins, MIT.** Course Fee: \$2,500 (includes room and board). Financial assistance available. Application Deadline: May 1, 1998. For information/applications, contact: **Carol Hamel, Admission Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543. E-mail: admissions@mbi.edu; Telephone: 508-289-7216; website: www.mbl.edu. An Equal Opportunity/Affirmative Action Institution.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Cellular/molecular immunology. A Postdoctoral position is available to investigate the cellular immune response to syphilis as well as its relationship to HIV transmission. Studies will examine the roles of specific cell types, such as monocytes/macrophages, T cells, and perhaps dendritic cells, in the progression of syphilis. The propensity of *Treponema pallidum* and/or its membrane lipoproteins to induce HIV gene expression in latently infected cells (which likely accounts for increased susceptibility to or transmissibility of HIV in syphilitic individuals) also will be a major focus of the project. The Fellow will have the opportunity to train in an attractive and dynamic research environment. Preference will be given to candidates with a strong background in contemporary cellular immunology and/or experience with HIV gene regulation. Candidates should send curriculum vitae and the names and addresses of three references to: **Dr. Michael V. Norgard, Chairman, Department of Microbiology, The University of Texas Southwestern Medical Center, 6000 Harry Hines Boulevard, Dallas, TX 75235-9048 USA. FAX: 214-648-5905. UT Southwestern is an Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS IN ARTHRITIS GENE THERAPY

Three positions immediately available within a highly motivated, interactive group exploring gene delivery applications in treating rheumatoid arthritis and musculoskeletal disease. Candidates with experience in molecular biology and/or immunology as well as excellent communication skills are encouraged to apply. Submit curriculum vitae, description of previous research, and list of references to: **Steven C. Ghivizzani, Ph.D., Department of Molecular Genetics and Biochemistry, University of Pittsburgh School of Medicine, Biotechnology Center, 300 Technology Drive, Pittsburgh, PA 15219.**

POSTDOCTORAL POSITIONS to study the regulation of herpes virus gene expression *in vitro* and *in vivo*. The studies may include structure/function analysis of the viral regulatory proteins, the biochemistry of virus/host interactions, or the development of viral vectors. Applicants should possess a doctoral degree in molecular genetics, biochemistry, or virology. Applicants should send a current curriculum vitae, and list of references to: **Neal DeLuca, Ph.D., Professor, Department of Molecular Genetics and Biochemistry, E1257 Biomedical Science Tower, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261.**

POSTDOCTORAL RESEARCH SCIENTIST position available immediately to study the binding and electron transfer reactions of cytochrome P450 with its redox partners, especially cytochrome b5. The nature of the intra and extra membrane interprotein interactions of cytochrome P450 will be examined. Familiarity with protein purification, protein modeling, enzyme kinetics, and molecular biology helpful. A Ph.D. in biochemistry or a related discipline is essential. Send résumé and three letters of reference to: **e-mail: lucy_waskell@quickmail.ucsf.edu; FAX: 415-750-6653.**

POSTDOCTORAL POSITION (cell biology) to investigate mechanisms of bile salt cytotoxicity via alterations in divalent cation transport/signaling in the hepatocyte/enterocyte. Send curriculum vitae and letters of reference to: **J. M. Donovan, M.D., Ph.D., West Roxbury, VA Medical Center, 1400 VFW Parkway, Boston, MA 02132. E-mail: donovan.joanne@brockton.va.gov. Harvard Medical School/Brigham and Women's Hospital affiliate.**

POSTDOCTORAL POSITIONS are available to study signal transduction and cell cycle regulation in epithelial cells. Applicants should have research experience in molecular biology and/or protein biochemistry. Send curriculum vitae and names and addresses of three references to: **Angela L. Tyner, Ph.D., University of Illinois at Chicago, Department of Molecular Genetics, M/C 669, 900 South Ashland Avenue, Chicago, IL 60607. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to study mechanisms involved in the renal transport and toxicity of mercury, especially with the isolated perfused renal tubule technique. Background in renal and/or metals pharmacology/toxicology preferred. Send curriculum vitae to: **Dr. Rudolph K. Zalups, Mercer University School of Medicine, 1550 College Street, Macon, GA 31207. MU is an Equal Opportunity/Affirmative Action Employer.**



THE WINERY OF
Ernest & Julio Gallo
**Postdoctoral
Research Associate**

Ernest & Julio Gallo Winery Research Department is seeking a Postdoctoral Research Associate to work on a challenging research project in our Genetic Research Group. We are looking for a horticulturist to facilitate germplasm analysis.

The successful candidate will be responsible for maintenance, propagation and enhancement of our germplasm collection. Responsibilities will include management of our new, computerized greenhouse. Research emphasis will be on germplasm evaluation through development and utilization of traditional/molecular screening techniques. The position requires a Ph.D. and at least two years experience in horticulture. Familiarity with tissue culture propagation, regeneration and molecular techniques is highly desirable.

The closing date for applications is April 30th, 1998. Qualified candidates are invited to mail/fax an introductory cover letter and curriculum vitae to:

E. & J. Gallo Winery
Human Resources Development - Research Associate
600 Yosemite Blvd., Modesto, CA 95354 Fax: 209-341-4559
Equal Opportunity Employer

Research

Human Genome Sciences is a Company with a mission to develop products to predict, prevent, treat and cure disease based on technology derived from its leadership position in the discovery and understanding of human, microbial and plant genes.

CELL BIOLOGY DEPT. SCIENTIST

The selected candidate will possess a Ph.D./M.D. and 5+ years laboratory experience in one of the following areas: Cellular Immunology, with concentration in T-cell immunology and antigen presentation; Cell Biology, with concentration in cell adhesion and migration, Chemotaxis and Cytoplasmic Ca²⁺ mobilization; or concentration in fibroblast, endothelial cells, smooth and skeletal muscular cells. Experience in tissue culture, immunoassay, hemopoietic and flow cytometry growth factors. Qualified candidate will conduct studies in small animals with novel therapeutic proteins and be creative in developing novel in vivo/in vitro models.

HGS encourages the pursuit of academic excellence and offers a competitive benefits package, including educational reimbursement, subsidized health club membership, medical/dental/life/disability insurance programs and a 401(k) plan with employer match. For immediate consideration, please send/fax your resume to

**Human Resources
Department, Human
Genome Sciences, Job #GG
4/3, 9410 Key West
Avenue, Rockville, MD
20850. FAX: (301)
309-1845. Equal
Opportunity Employer.**



HGS

Bioinformatics Specialist

Headquartered in a 66,000 square foot, state-of-the-art research facility in the San Francisco Bay Area, **Tularik Inc.** is a rapidly growing, privately-held biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that regulate gene expression. We have ongoing projects in the following areas: immune disorders; inflammation, obesity, hypercholesterolemia, viral diseases; bacterial diseases; and cancer. Our continued growth has created a unique opportunity for a dedicated scientific professional in the area of bioinformatics to join our team and help us shape the future of human therapeutics.

You will work closely with biologists to identify novel genes of potential value to Tularik's drug discovery program from proprietary and public data sources. Responsibilities include the design of databases for our genomics programs; the development of novel data-mining algorithms and the improvement of user interfaces to bioinformatics software and databases. The ideal candidate will have a minimum of a BS in Biology or Computer Science along with a solid background in computer-assisted DNA & protein sequence analysis. Qualified candidates will also be familiar with major genomic databases and sequence analysis methods; possess experience with UNIX operating systems and relational databases; and possess excellent interpersonal and written/verbal communication skills. Knowledge of HTML/CGI programming, Perl, C/ C++ or Java is highly desirable.

In addition to an attractive total compensation package, including competitive salary, comprehensive benefits and equity participation, Tularik offers experienced leadership and an exciting research environment that recognizes achievement. Interested candidates should forward their resume to:

Tularik Inc.
HR Dept., Attn: SC-BIO
Two Corporate Drive
South San Francisco, CA 94080
fax: (650) 829-4303
email: resume@tularik.com
www.tularik.com



EOE

Creating Drugs That Regulate Genes

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



DEFINING SUCCESS IN BIOTECHNOLOGY

SCIENTIST - PROTEIN CHEMISTRY

The successful candidate will perform independent research in the isolation and characterization of novel proteins to explore potential therapeutic targets. This person must have extensive experience in the purification and characterization of proteins derived from a variety of biological sources and have in-depth knowledge of state-of-the-art protein characterization techniques. The ideal candidate should also have some experience in structure/function studies. A Ph.D. in Biochemistry with 3+ years of postdoctoral, or equivalent, of industrial experience is required. The candidate must also possess excellent communications skills, be able to manage a small group and have the ability to participate as an integral member of a multi-disciplinary research team.

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. Position is based in our Cambridge, MA, facility. Please forward your resume to: Biogen, Inc., Job Code: RC-SCI, 14 Cambridge Center, Cambridge, MA 02142; Fax: (617) 679-2546; E-mail: ron_cornila@biogen.com. Biogen is an Equal Opportunity Employer.

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POSITIONS OPEN

POSTDOCTORAL TRAINING IN CELL AND MOLECULAR BIOLOGY OF REPRODUCTION

The Center for Biomedical Research of the Population Council offers Postdoctoral Training in cell and molecular biology of reproduction. Research interests of our training faculty include (name, title/role, areas of research):

James F. Catterall, Senior Scientist/Director. Cell-specific regulation of gene expression by androgens; apoptosis in spermatogenesis.

Indrani Bagchi, Scientist. Molecular mechanism of blastocyst implantation.

Milan Bagchi, Scientist. Nuclear receptor structure and function; transcriptional regulation.

Ching-Ling C. Chen, Senior Scientist. Regulation of testis-specific genes by GATA transcription factors; the pituitary-testicular axis.

C. Yan Cheng, Senior Scientist. Biochemistry and physiology of testicular proteins; cell-cell interaction.

Matthew P. Hardy, Scientist. Developmental biology of Leydig cells; stress and Leydig cell function.

Patricia L. Morris, Scientist. Sertoli cell-germ cell interaction; JAK-STAT signal transduction; regulation of Leydig cell function.

The Center for Biomedical Research is located on the campus of Rockefeller University and provides excellent facilities for research and an outstanding scientific environment for postdoctoral training. Please send curriculum vitae and names and addresses of three references to: **The Fellowship Secretary, Population Council, Center for Biomedical Research, 1230 York Avenue, New York, NY 10021 USA. E-mail: jeatterall@popcbr.rockefeller.edu. Applications from women and minorities are encouraged.**

POSTDOCTORAL POSITIONS are available immediately to study the molecular aspects of bioactive peptide hormones (natriuretic peptides, angiotensins, and/or growth factors) and the structure-function of their respective transmembrane receptors. Qualified candidates should have a Ph.D. and/or M.D. degree. Individuals with different disciplines using genetics and molecular biology techniques will be considered; however, those with experience in molecular aspects of hypertension and cardiovascular regulation will be given preference. Strong background in molecular cloning, gene expression, and site-directed mutagenesis is highly desirable. Send curriculum vitae and three references to: **Dr. Kailash N. Pandey, Department of Physiology, SL39, Tulane University Medical School, 1430 Tulane Avenue, New Orleans, LA 70112-2699. FAX: 504-584-2675. Tulane University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION MOLECULAR BIOLOGY AND PATHOGENESIS OF HUMAN PAPILOMAVIRUS INFECTION

A Postdoctoral position is available to study molecular interactions between human papillomavirus (HPV) and keratinocytes in the pathogenesis of anogenital neoplasia. Experience with cloning, gene expression, and cell culture preferred. Please send curriculum vitae, brief statement of research interests, and names and addresses of three references to: **Dr. Joel Palefsky, University of California, San Francisco, Box 0100, 521 Parnassus Avenue, San Francisco, CA 94143. FAX: 415-476-4204; e-mail: joelp@labmed.ucsf.edu.**

A **POSTDOCTORAL POSITION** available to study the mechanics of DNA recombination reaction using a bacterial enzyme (*Biochemistry* 35:3563; *ibid.* 36:4650). Willingness to work on quantitative research is essential. Careful individuals with a background in biochemistry, chemistry, or physics are encouraged to apply. Send curriculum vitae to: **Kenji Adzuma, The Rockefeller University, Box 256, 1230 York Avenue, New York, NY 10021. No telephone calls.**

POSTDOCTORAL FELLOWSHIP (with potential subsequent faculty appointment) to study intestinal gene regulation (*J. Clin. Invest.* 95:745; *Am. J. Physiol.* 271:G377; *J. Biol. Chem.* 272:31006). Experience in promoter analysis or transgenics required. Send cover letter, curriculum vitae, and names of three references to: **Dr. Benjamin L. Shneider, Department of Pediatrics, Mount Sinai Medical Center, Box 1656, One Gustave L. Levy Place, New York, NY 10029.**

POSITIONS OPEN

POSTDOCTORAL POSITION CARDIOVASCULAR MOLECULAR BIOLOGY

The laboratory uses gene knockout and transgenic technologies to explore questions of cardiovascular development, differentiation, and function. Integrative approaches involving molecular genetics, biochemistry, cell biology, and whole organ and animal physiology are used. Candidates should have the Ph.D. or M.D. and experience either in molecular genetics, muscle mechanics, or cardiovascular physiology. Please mail or FAX your curriculum vitae and a description of your research interests to: **Dr. Jeffrey Robbins, Professor and Director, Division of Molecular and Cardiovascular Biology, Children's Hospital, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-3852; e-mail: jeff.robbins@chmcc.org. Children's Hospital is an Affirmative Action/Equal Opportunity Institution.**

POSTDOCTORAL POSITION IN HUMAN CANCER CYTOGENETICS

A Postdoctoral position is available immediately in the expanding Division of Human Cancer Genetics, under the leadership of **Dr. Albert de la Chapelle**, to join a highly interactive group working on the identification of cancer susceptibility genes involved in human brain cancers and childhood cancer syndromes. Proven experience in molecular cytogenetics, FISH, and comparative genome hybridization (CGH) required. Applicants should be highly motivated with an interest in novel technologies. The successful candidate is expected to maintain a CGH facility for the brain tumor group. The possibility for Board certification exists. The position is for at least two years. Please send curriculum vitae and names of three references to: **Ralf Krahe, Ph.D., Division of Human Cancer Genetics, Medical Research Facility, Room 438, 420 West 12th Avenue, Columbus, OH 43210. Telephone: 614-688-4766; FAX: 614-688-4761; e-mail: krahe.2@osu.edu.**

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH INVESTIGATOR. To join Division of Pulmonary and Critical Care Medicine in an academic medical center. Current research works include cardiopulmonary interactions, mechanisms of inflammation in shock, and neurobiological control of sleep apnea. Applicant should have experience in immunology, molecular biology, cell culture, and monoclonal antibodies. Send curriculum vitae and three letters of reference to: **Harry Steinberg, M.D., Division of Pulmonary and Critical Care Medicine, Room C-20, Long Island Jewish Medical Center, 270-01 76th Avenue, New Hyde Park, NY 11040. FAX: 718-470-1035. LIJMC is the Long Island campus for the Albert Einstein College of Medicine. North Shore-Long Island Jewish Health System is an Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS

Postdoctoral positions are available immediately to study translational control in early development (*Xenopus* and mouse) or during neurogenesis. A background in molecular biology, developmental biology, or neurobiology is essential, and familiarity with RNA-protein interactions is highly desirable. For further information see website: <http://www.ummed.edu/dept/mgm/>. Send curriculum vitae and the names of three persons who may serve as references to: **Dr. Joel D. Richter, Department of Molecular Genetics and Microbiology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.**

POSTDOCTORAL POSITION in aging research available immediately to generate and study effects on aging of targeted deletion/duplication of the glucocorticoid receptor gene in mice. Ph.D. with experience in cloning and designing/measuring expression of targeting constructs desirable. Send a curriculum vitae and letter detailing experience and have three letters of recommendation sent to: **James Nelson Ph.D., Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. E-mail: nelsonj@uthscsa.edu.**

The University of Texas Health Science Center at San Antonio is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS in reproductive biology. NIH-supported training opportunities in an interdepartmental, multidisciplinary program in a vital medical center. Research areas include molecular aspects of growth and differentiation during embryogenesis; expression and function of cell surface components involved in embryo attachment and implantation; endocrine control and regulation of corpus luteum and endometrium; role of growth factors and oncogenes in growth and differentiation; regulation of ovarian function in human and primates; effect of aging on uterine leiomyoma; mechanisms regulating alternative RNA splicing in sexual differentiation; molecular events in spermatogenesis and reproductive toxicology; effects of chemotherapy and radiation on germ cell mutations; molecular mechanisms controlling gene activity and calcium homeostasis in testis and uterus; relationship of oncogene-regulated gene function to development and differentiation; regulation of growth factors by hormones, matrix components, and gravity; regulation of purine metabolism in placental development using transgenic approaches; regulation by steroids of cancers of the male and female reproductive tracts.

If interested, send curriculum vitae and two references to: **Dr. B. Sanborn, Department of Biochemistry and Molecular Biology, University of Texas Houston Medical School, P.O. Box 20708, Houston, TX 77225. Telephone: 713-500-6064; FAX: 713-500-0652; e-mail: bsanborn@utmmg.med.uth.tmc.edu; website: www.bmb.med.uth.tmc.edu/reprobio/consortium.html.**

The Training Program encourages applications from individuals from underrepresented minorities. Applicants must be U.S. citizens or permanent residents. The UTHSC is an Equal Opportunity Employer.

MAYO CLINIC AND FOUNDATION POSTDOCTORAL POSITIONS

Several Postdoctoral positions are available immediately for individuals interested in studies of cancer predisposition. Projects include (1) identification of novel breast cancer predisposition genes, (2) genetic analysis of tumor progression pathways in breast and ovarian tumors (experience in positional cloning and LOH analysis is preferred), (3) analysis of the role of BRCA2 in cell cycle control, and DNA repair. Experience in molecular biology and tissue culture is required. A highly competitive salary with full benefits is available to motivated candidates. Send a full curriculum vitae with names and addresses of three references to: **Fergus J. Couch, Ph.D., Division of Experimental Pathology, Guggenheim 1001A, Mayo Clinic and Foundation, 200 First Street S.W., Rochester, MN 55905. E-mail: couch.fergus@mayo.edu. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer.**

POSTDOCTORAL POSITION TO STUDY MOLECULAR MODELING/THERMODYNAMICS OF CARCINOGEN-MODIFIED DNA

Our interdisciplinary group is studying mutagenesis, repair, and replication and ranges from chemistry and biochemistry to genetics. Prefer recent Ph.D. with a background in these areas. Experience in physical chemistry and molecular modeling is essential. Must have good communications skills and ability to interact with other professionals and technical members of a research team. Send curriculum vitae to: **Dr. B. Singer, Donner Laboratory, LBL, University of California, Berkeley, Berkeley, CA 94720. An Affirmative Action Employer.**

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study bFGF/FGFR-1 and JAK/STAT signaling in human melanoma and its precursor lesions. The position requires expertise in molecular biology. Interested candidates should send their curriculum vitae and the names of three references to: **Dorothea Becker, Ph.D., Department of Pathology, University of Pittsburgh, BST E1050, 211 Lothrop Street, Pittsburgh, PA 15213.**

POSTDOCTORAL POSITION available to study the cell biology/biochemistry of extracellular matrix-cell-cytoskeletal interactions, especially signaling through CD44 on chondrocytes. Send curriculum vitae and statement of research interest to: **Cheryl B. Knudson, Ph.D., Department of Biochemistry, Rush Medical College, 1653 West Congress Parkway, Chicago, IL 60612. E-mail: cknudson@rush.edu. Equal Opportunity Employer.**

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GLOBAL OPPORTUNITIES



**The Chair of the Custodian
of the Holy Mosques
King Fahd Bin Abdul Aziz Al-Saud
for Medical Biotechnology
at the Arabian Gulf University**

The Arabian Gulf University in Bahrain, a regional university sponsored by the Gulf Cooperation Council, is seeking applications for the newly established position of Chair of the Custodian of the Holy Mosques, King Fahd Bin Abdul Aziz Al-Saud, for Medical Biotechnology. This Chair will be a member of the Biotechnology Program in the College of Graduate Studies, in conjunction with the College of Medicine and Medical Sciences.

This Chair is to enhance the ongoing teaching and research in the fields of genetic engineering and molecular biology, with their medical applications.

Job Description:

The candidate is expected to undertake the following activities:

1. Teach courses related to Genetic Engineering and Molecular Biology.
2. Supervise projects and theses of Diploma and M.Sc. students related to the above-mentioned subjects.
3. Upgrade teaching and research laboratories of the program.
4. Develop curriculum and research areas.
5. Conduct training courses in the fields of specialization.

Job Qualifications:

The candidate should have the following qualifications:

1. Ph.D. in Genetic Engineering or Molecular Biology with medical applications.
2. Good record of multidisciplinary research, publications, and teaching experience in one or more of the above-mentioned areas.
3. Experience in supervising graduate students.
4. Hold the academic position of Full Professor.

Benefits:

1. Monthly salary; ranges from 1450 to 2050 BD(1BD=US \$2,65), depending upon years of experience.
2. Business class return air tickets annually for faculty member and family, up to five tickets.
3. Monthly transport allowance.
4. Furnished accommodation at the University Campus, or accommodation allowance.
5. End-of-service gratuity.
6. Free public medical care, covering family, available at government hospital and health centers.
7. 60 days paid annual holiday.
8. Children's education allowance.

Applications, including curriculum vitae and scientific career, documentation of teaching experience and other professional activities, three references, and list of publications, should be addressed to: **Dean of the School of Graduate Studies, Arabian Gulf University, P.O. Box 26671, Manama, Bahrain. Deadline: May 15, 1998.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW ORTHOPAEDIC SURGERY

A Postdoctoral position is available to study the biological responses to orthopaedic wear debris and develop strategies for the improvement of orthopaedic implants. Candidates should be familiar with the biology of bone and cartilage, with particular emphasis upon cytokines and growth factors. A working knowledge of inflammation, immunology, and arthritis is required, and experience with biomaterials or tissue engineering would be an advantage. The project will involve working with both rodent models of joint disease and patient samples. The successful candidate will perform independent research, have superb bench skills, will be able to interact with both scientists and surgeons, and is expected to have excellent written and communication skills.

Please send curriculum vitae to:

Paul Wooley, Ph.D.
Wayne State University
4707 St. Antoine Boulevard Suite 1-S
Detroit, MI 48201

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POSTDOCTORAL POSITION

The National Institute of Environmental Health Sciences (NIEHS) invites applications for a Postdoctoral position in the Laboratory of Toxicology. The selectee will begin and help administer a clinical trial of the effects of oral boron (as boric acid) given to postmenopausal women, and will conduct studies in rats aimed at understanding the mechanism of the increased bone strength. These studies will likely involve collaborating with Chemists at and outside of NIEHS, as well as Structural Biologists and imaging experts at NIEHS. The initial appointment is for one year, renewable up to five years. Applicants must be U.S. citizens or permanent residents and hold a Ph.D. or M.D. with less than five years of postdoctoral experience. Submit curriculum vitae and three letters of reference to: Dr. Robert Chapin, Laboratory of Toxicology, Environmental Toxicology Program, National Institute of Environmental Health Sciences, P.O. Box 12233, Research Triangle Park, NC 27709. Voicemail/Telephone: 919-541-3474; e-mail: chapin@niehs.nih.gov. Application deadline is July 15, 1998.

POSTDOCTORAL POSITION IN SEATTLE

Position available to study visual transduction. Experience in biochemistry and/or molecular biology desirable. Send curriculum vitae and names of references to:

Dr. Krzysztof Palczewski
University of Washington
Department of Ophthalmology
Health Sciences Building, Box 356485
1959 N.E. Pacific Street
Seattle, WA 98195-6485
E-mail: palczews@u.washington.edu

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POSTDOCTORAL POSITION/IMMUNOLOGY YALE UNIVERSITY SCHOOL OF MEDICINE

Ph.D. or M.D.-Ph.D. position to study the immunopathogenesis of murine Lyme borreliosis and infection-related autoimmunity. Experience and/or interest in microbial pathogenesis, molecular biology, T cell cloning, and/or animal models of infectious/autoimmune diseases necessary. Send curriculum vitae, research interests, and three reference letters to: Linda Bockenstedt, M.D., Yale University School of Medicine, 333 Cedar Street, Box 208031, New Haven, CT 06520-8031. E-mail: linda.bockenstedt@yale.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the biology of ion channels and cell signaling in liver. A strong background in molecular biology or cell physiology is essential. Experience in mammalian expression or patch-clamp recording techniques is highly desirable. Interested candidates should send a curriculum vitae and names of three references to: Dr. Steven Lidofsky, Department of Medicine and Pharmacology, University of Vermont College of Medicine, 414 Burgess FAHC/MCHV, Burlington, VT 05401. E-mail: steven.lidofsky@uvm.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS AT STANFORD UNIVERSITY

Ph.D./M.D. scientists with expertise in cellular biology, molecular biology, biochemistry, chemical biology, or gene therapy technology are invited to apply for Postdoctoral positions open in the laboratories listed below. Send curriculum vitae, letter describing research background, plus names and addresses of three references to the appropriate faculty member at: **The Department of Molecular Pharmacology, Stanford University School of Medicine, 300 Pasteur Drive, Stanford, CA 94305. FAX: 650-725-2952.**

Helen Blau, Ph.D.: Protein and RNA interactions that mediate cell fate (proliferation, differentiation, cancer); gene therapy for cancer and cardiovascular disease; vector development.

Karlene Cimprich, Ph.D.: Regulation of the DNA damage checkpoints and role of the ATR kinase in the cellular response to DNA damage.

James Ferrell, M.D., Ph.D.: Regulation of M-phase and biochemistry of the MAP kinase cascade.

James Whitlock, M.D.: Regulation of transcriptional responses to environmental stimuli, such as dioxin, hypoxia, and hormones.

Stanford is an Equal Opportunity Employer.

POSTDOCTORAL POSITION TO INVESTIGATE THE ROLE OF p53 MUTATIONS IN ONCOGENESIS

Applications are invited from recent graduates for a Postdoctoral position in a laboratory involved in understanding the molecular biology of the tumor suppressor p53. This position is to identify the pathway affected by p53 mutations leading to oncogenesis. Individuals with expertise in recombinant DNA technology, particularly DNA sequencing, cDNA technology, and mammalian cell culture systems, are especially encouraged to apply. Salary is negotiable. Send complete curriculum vitae and arrange for three letters of reference to be sent directly to: Sumitra Deb, Ph.D., Associate Professor, Department of Microbiology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284. FAX: 210-567-6612; e-mail: deb@uthscsa.edu. The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.

NIH-funded **POSTDOCTORAL POSITIONS** available to study the role of protein kinases in regulating cytoskeletal dynamics during chemotaxis and cytokinesis. Recombinant protein expression, mutagenesis, and analyses of transfected mammalian cells will be conducted. Prefer recent Ph.D. with experience in recombinant DNA and background in molecular biology/biochemistry. Please send curriculum vitae and the names of three references to: Prof. David M. Terrian, Department of Cell Biology, East Carolina University School of Medicine, Greenville, NC 27858. E-mail: dterrian@brody.med.ecu.edu.

POSTDOCTORAL POSITION available to purify, characterize, and clone enzymes involved in the biosynthesis of nucleoside antibiotics. Experience with purification of native enzymes is essential; experience with molecular biology is highly desirable. Send curriculum vitae and the names of three references to: Dr. Ronald J. Parry, Department of Chemistry—MS 60, Rice University, 6100 Main Street, Houston, TX 77005-1892.

CONFERENCE

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Topics include protein folding, refolding, and aggregation; manipulation of intrinsic stability; mechanisms for stabilization; formulation and processing of protein pharmaceuticals. Contact: John Carpenter, Telephone: 303-315-6075; FAX: 303-315-6281; e-mail: john.carpenter@uchsc.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS. Research into (1) multidrug resistance in cancer mediated by P-glycoprotein, and (2) F1F0-ATP synthase enzyme in bacterial membranes. More information at website: www.urmc.rochester.edu/smd/biophys/faculty/senior.htm. Send curriculum vitae and three recommendations to: Dr. Alan E. Senior, Biochemistry/Biophysics, Box 712, University of Rochester Medical Center, Rochester, NY 14642. E-mail: alan_senior@urmc.rochester.edu.

EUROPEAN OPPORTUNITIES

POSTDOCTORAL POSITION BIOCHEMICAL/MOLECULAR ENVIRONMENTAL TOXICOLOGY

A research position is available at the Swiss Federal Institute of Environmental Science and Technology (EAWAG) and Swiss Federal Institute of Technology in Zurich (ETH) on endocrine disruptors. The work focuses on the development and establishment of novel *in vitro* assays using permanent fish cell lines to identify estrogenic compounds, assess their activity in mixtures and environmental samples, and identify mechanisms of action. Measurement of estrogen-induced gene products using RT-PCR, differential display PCR, and transfections.

Qualifications: Ph.D. degree in biochemistry, molecular or cell biology, toxicology, or related disciplines. Previous experience in RT-PCR, DD-PCR, transfections, and cell culture handling.

Send curriculum vitae with photograph, publication list, outline of experience, and three references to: Dr. Karl Fent, Swiss Federal Institute of Environmental Science and Technology/Swiss Federal Institute of Technology in Zurich, Dübendorf CH-8600 Switzerland. E-mail: fent@eawag.ch.

A three-year **POSTDOCTORAL POSITION** available immediately to study the p53 and Fas-induced apoptotic pathways. The candidate should have an experience in cell/molecular biology, preferably in areas related to cell death, and must have a nationality of a EC member state or an associate state excluding France. Please send curriculum vitae and names of three references to: Elisheva Yonish-Rouach, Ph.D., Laboratoire de Cancérogénèse Moléculaire, DRR, DSV, CEA, 92265 Fontenay-aux-Roses Cedex, France. FAX: (+33) 1-46-54-87-13; e-mail: eyonishr@armoise.saclay.cea.fr.

COURSES & TRAINING

NEW HARVARD TRAINING PROGRAM IN SLEEP, CIRCADIAN, AND RESPIRATORY NEUROBIOLOGY

Sponsored by NHLBI's National Center for Sleep Disorders Research. Preceptors: Dr. Emery Brown, Dr. Charles Czeisler, Dr. Richard Kronauer, Dr. Robert McCarley, Dr. Steven Reppert, Dr. Clifford Saper, Dr. Steven Shea, Dr. J. Woodrow Weiss, and Dr. David P. White. Send completed application, curriculum vitae, and three reference letters by May 1, 1998, to: Charles A. Czeisler, Ph.D., M.D., Program Director, Circadian, Neuroendocrine, and Sleep Disorders Section, Brigham and Women's Hospital, Harvard Medical School, 221 Longwood Avenue, Boston, MA 02115.

ANNOUNCEMENTS

PROGRAM FOR COLLABORATIVE RESEARCH ON BPD

The Southwest Foundation for Biomedical Research announces an opportunity for **INVESTIGATORS** to participate in a nationwide collaborative program of research on the developmental pathobiology of bronchopulmonary dysplasia (BPD). The program will provide, to collaborating Investigators, a mammalian model of BPD for basic research studies focused on the molecular etiology, mechanism of pathogenesis, and prevention of BPD. Research designed to define in molecular terms the processes of vasculogenesis/angiogenesis, alveolization, organization of extracellular matrix, and immune function are encouraged. The Southwest Foundation for Biomedical Research invites inquiries, by May 1, 1998, from Investigators at U.S. institutions who could accelerate our understanding of BPD.

For further information, call or write: Dr. Jacqueline Coalson, Department of Pathology, University of Texas Health Science Center—San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7750. Telephone: 210-567-4121; FAX: 210-567-6725

The Wellcome Trust

Senior Research Fellowships in Biomedical Science in India

The Wellcome Trust has established a new scheme for five year Senior Research Fellowships to support biomedical research in India. There will be an annual competition for scientifically or clinically qualified researchers of exceptional ability who wish to pursue a programme of research in an eligible, non-commercial research institute within India.

Eligibility: These awards will be available to nationals of any country who can demonstrate a commitment to biomedical research and who wish to establish a full-time research career in India. Applications are particularly encouraged from scientists working outside India and wishing to return.

Normally candidates will be expected to have between five and ten years' research experience at a postdoctoral level or equivalent and to have a substantial record of publications in their chosen area of research in leading international journals.

It is expected that candidates will have spent a minimum period of three years of their postdoctoral (or equivalent) research career working outside India.

* All candidates must have a sponsor in their host department who will guarantee space and facilities for the prospective fellow and who can reassure the Trust that the fellow will be welcomed in the host institution. The sponsor must hold an appropriate established post at the host institution.

* The host institution should have the capacity to provide a future career position for the fellow subject to its usual selection procedure. It is expected that on completion of his/her award the fellow would become a permanent member or staff.

* Prior to submitting an application, candidates must obtain written authority that their host institutions in India would be willing both to accept and administer the award according to the Trust's standard terms and conditions of grant.

Value of Awards: Wellcome Senior Fellows are appointed at a salary commensurate with their experience and seniority. The essential costs of the research programme will be provided, including equipment, research expenses and personnel. All these requests must be fully justified.

Selection Procedure: Candidates will be asked to complete a preliminary application form which can be obtained from the Wellcome Trust offices and which should be sent back to the Wellcome Trust by 1st June 1998. Late submissions will not be accepted.

Candidates will be notified in writing of their success (or otherwise) in reaching the next stage of this competition and short-listed candidates will be asked to submit a full application. These must be returned to the Trust by 19th October 1998.

Before making a formal application to the Trust applicants must ensure that they are already able to meet all the criteria marked with an asterisk(*) or that negotiations are in hand.

Those selected for interview will be informed in writing by early February 1999 and the interviews will take place in April 1999.

Enquiries may be directed to, and forms obtained from: **Dr Mary Phillips, International Programme Manager, The Wellcome Trust, 183 Euston Road, London, NW1 2BE, UK. Tel: +44 171 611 8410; Fax: +44 171 611 7288. E-Mail: m.phillips@wellcome.ac.uk**



The Wellcome Trust is a Registered Charity, No. 210183, and seeks to support research in biomedical sciences and the history of medicine by means of grants and other activities.

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The Cancer Research Campaign celebrating its 75th anniversary this year, is the largest support of cancer research in British universities and medical schools.

After two successful rounds, the Campaign is pleased to announce the third round of the Senior Cancer Research Fellowship. The aim of this Fellowship scheme is to support outstanding young investigators who have shown special promise in their initial studies in a cancer relevant research field and to provide them with an opportunity to establish an independent research group.

Candidates should have a PhD, have completed at least 3 years postdoctoral work and should not normally be over 35 years of age. However, equal consideration will be given to those over this age where their career has been affected either by a late start, or by interruption for personal or family reasons.

A CRC Senior Cancer Research Fellowship may be held in any CRC - funded Research Institute, Laboratory or Research Group, or alternatively in an appropriate UK university department, subject to the usual CRC funding restrictions.

The Fellowship will provide both personal and research support (salary for technical support plus consumables), plus a set-up equipment grant in the first year, will be tenable for five years in the first instance. Renewal will be subject to a successful bid for programme grant funding during the course of the fellowship.

Applicants are invited to submit a two page preliminary proposal outlining their proposed programme of research, an indication of the likely host institution should be included, plus a full CV. Successful applicants will then be invited to submit a full application.

For an informal discussion of your application, please telephone Dr Fiona Hemsley on 0171 224 1333. Email: fhemsley@crc.org.uk or write to Cancer Research Campaign, 10 Cambridge Terrace, London NW1 4JL. Closing date: Friday 29th May 1998.

Fighting cancer on all fronts

ANNOUNCEMENTS

PRECLINICAL TOXICOLOGY RESOURCE FOR ALZHEIMER'S DISEASE DRUG DEVELOPMENT

The National Institute on Aging supports a contract for the preclinical toxicology evaluation of compounds that may have value in the treatment of Alzheimer's disease. Individual *U.S. scientists or small businesses* that would otherwise not have sufficient resources for toxicological evaluation of promising compounds can apply for this program. The data generated would be used by a sponsor to apply for an Investigational New Drug designation from the Food and Drug Administration in order to take the compound into human Phase I clinical trials. Before it can be considered for this program, a compound must have sufficient pre-clinical biological and/or behavioral information available to indicate its potential efficacy for the treatment of Alzheimer's disease. For further information contact:

Neil Buckholtz, Ph.D.
Chief, Dementias of Aging
Neuroscience and Neuropsychology of
Aging Program
National Institute on Aging
Gateway Building, Suite 3C307
7201 Wisconsin Avenue MSC 9205
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- 1. Kristie, T.M., and B. Roizman, Proc. Natl. Acad. Sci. USA 83: 3218-3222, 1986.
- 2. Singh, H., Sen. R., Baltimore, D., and P. A. Sharp. Nature 319: 154-158, 1986.
- 3. SivaRaman, L., and B. Thimmappaya. Proc. Natl. Acad. Sci. USA 84: 6112-6116, 1987.

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