

# HOW DO WOMEN MANAGE IN BIOTECHNOLOGY COMPANIES? ASK OUR CEO.

Or our VP of Business Development, or any of the many other women who have helped make SyStemix a rising star in the biotechnology industry.

Because here we have developed an environment which emphasizes collaboration between team members. Collaboration which has resulted in the discovery and isolation of hematopoietic stem cells and megakaryocyte progenitors. As we continue pioneering new therapies that use the body's own cells to treat disease, we continue to seek additional talented people to join us.

## RESEARCH

ANTI-VIRAL/GENE THERAPY  
MOLECULAR/CELL BIOLOGY  
TISSUE CULTURE/FACS  
PROTEIN CHEMISTRY

## DEVELOPMENT/PILOT MANUFACTURING

CELL EXPANSION & SEPARATION  
PROTEIN ANALYTICAL CHEMISTRY  
PROCESS DEVELOPMENT/ENGINEERING  
VALIDATION  
FACILITIES  
FACS/CELL PURIFICATION

## QUALITY/ REGULATORY AFFAIRS

QC SUPERVISOR  
QC MONOCLONAL REAGENT SPECIALIST  
QA DIRECTOR

## ADMINISTRATION

VICE PRESIDENT AND  
CHIEF FINANCIAL OFFICER

Contribute to this exciting effort. If you're seeking a company that values the contributions of all its team members, join our exciting environment which fosters both personal and professional growth. We offer an excellent compensation and benefits package. Send your resume to: SyStemix, Inc., Dept. SCYD34, 3155 Porter Drive, Palo Alto, CA 94304 or via FAX to (415) 856-4919. We are proud to be an equal opportunity employer.

Join us at the Career Connection Fair in La Jolla on March 25th and 26th.



## **FOGARTY INTERNATIONAL CENTER MEETING**

### **TRANSFORMING GROWTH FACTOR- $\beta$ s: BIOLOGICAL MECHANISMS AND CLINICAL APPLICATIONS**

Karl A. Piez and Michael B. Sporn, Co-Chairmen

May 4–6, 1994, Jack Masur Auditorium, Clinical Center, National Institutes of Health

**May 4 (am) Receptors, binding proteins, and signal transduction** (Moderator: Karl Piez)

Philip Schambra (*NIH*)

Rik Derynck (*Univ of Calif, San Francisco*)

Kohei Miyazono (*Ludwig Inst, Uppsala*)

Xiao-Fan Wang (*Duke*)

Harvey Lodish (*MIT*)

Erkki Ruoslahti (*La Jolla Cancer Res*)

Joan Massagué (*Sloan Kettering*)

**May 4 (pm) Regulation and cellular activity** (Moderator: Anita Roberts)

Seong-Jin Kim (*NIH*)

Daniel Rifkin (*New York Univ*)

Carl-Henrik Heldin (*Ludwig Inst, Uppsala*)

Harold Moses (*Vanderbilt Univ*)

Larry Gentry (*Medical College of Ohio*)

Joseph Madri (*Yale Medical School*)

**May 5 (am) Development** (Moderator: Harold Moses)

Rosemary Akhurst (*Univ of Glasgow*)

Tom Doetschman (*Univ of Cincinnati*)

Christine Mummery (*Hubrecht Labs,  
Utrecht*)

Stefan Karlsson (*NIH*)

Charles Daniel (*Univ of Calif, Santa Cruz*)

**May 5 (pm) Bone, wound healing, and fibrosis** (Moderator: Joan Massagué)

David Rosen (*Celtrix*)

Wayne Border (*Univ of Utah*)

Mark Ferguson (*Univ of Manchester*)

Snorri Thorgeirsson (*NIH*)

Arnold Greenberg (*Manitoba Inst  
of Cell Biol*)

**May 6 (am) Heart, immune and nervous system, and cancer** (Moderator: Carl-Henrik Heldin)

Harold Varmus (*NIH*)

Jeanette Thorbecke (*New York Univ*)

Anita Roberts (*NIH*)

Klaus Unsicker (*Univ of Heidelberg*)

Sharon Wahl (*NIH*)

Michael Brattain (*Medical College of Ohio*)

Adriano Fontana (*Univ of Zurich*)

**May 6 (pm) Pharmacology and clinical applications** (Moderator: Michael Sporn)

Larry Ellingsworth (*Celtrix*)

Henry McFarland, Michael Racke (*NIH*)

Martin Robson (*Univ of South Florida*)

John Haley (*Oncogene Science*)

Bert Glaser (*Retina Center, Baltimore*)

John Termine (*Eli Lilly*)

There will be poster sessions on May 4 and 5. The deadline for poster submission is April 1. For further information and registration contact: Sheila Feldman, FIC Bldg 16, NIH, Bethesda, MD 20892; phone: 301-496-4161; facsimile: 301-496-8496. There is no deadline for registration. There will be a satellite workshop on "TGF- $\beta$  and Protection of the Brain from Vascular and Metabolic Injury" on May 3. For information, investigators working actively in this area may contact Michael Sporn, Bldg 41, NIH; phone: 301-496-5391; facsimile: 301-496-8395.

# Fellowships for Biological and Biomedical Sciences

The Howard Hughes Medical Institute has a number of fellowship programs that support training in fundamental biological and biomedical research. Awards, based on international competitions, focus on research directed to understanding basic biological processes and disease mechanisms. Fellowships may be held at academic or nonprofit research institutions.

---

## Predoctoral Fellowships in Biological Sciences

Up to five years of support for full-time graduate study toward a Ph.D. degree in biostatistics, cell biology and regulation, epidemiology, genetics, immunology, neuroscience, or structural biology. Applicants must not have completed the first year of postbaccalaureate graduate study in biology. *Application deadline: early November.*

---

## Postdoctoral Research Fellowships for Physicians

Three years of support for training in fundamental research subsequent to at least two years of postgraduate clinical training and no more than two years of postdoctoral research training. *Application deadline: early January.*

---

## Research Training Fellowships for Medical Students

An opportunity for medical students in the United States to explore a burgeoning interest in fundamental research. Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH). *Application deadline: early December.*

---

## Research Scholars at the National Institutes of Health

Under this joint HHMI-NIH program, medical students in the United States spend an intensive year in research in the intramural program at the NIH in Bethesda, Maryland. Residence is provided at the Cloister on the NIH campus. *Application deadline: early January.*

---

## For Program Announcements and Applications

### *For Predoctoral Fellowships:*

Hughes Fellowship Program  
The Fellowship Office  
National Research Council  
2101 Constitution Avenue  
Washington, D.C. 20418  
United States of America  
(202) 334-2872

### *For Other Programs:*

Howard Hughes Medical Institute  
Office of Grants and Special Programs  
Department AL95  
4000 Jones Bridge Road  
Chevy Chase MD 20815-6789  
United States of America  
(301) 215-8889

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

# Inflammatory Diseases Research

The DuPont Merck Pharmaceutical Company was created in 1991 to be at the leading edge of science, medicine and technology in bringing novel solutions to major unmet medical needs. We are a research-based pharmaceutical company - confident of our power to grow.

We are establishing a team of creative and dynamic scientists to drive our search for novel anti-inflammatory therapeutics. We currently have a number of openings within the Inflammatory Diseases Research Group, which utilizes a team-oriented approach to discover novel, mechanism-based, therapies for arthritic and autoimmune diseases:

## **Ph.D. Cellular Biochemist**

We are seeking a cellular biochemist to target cell signaling pathways and cellular activation mechanisms. Requirements include a Ph.D. or equivalent with a minimum of two years related postdoctoral experience preferably in inflammation research. The candidate is expected to have expertise in signal transduction cascades leading to cell activation and cell cycling processes including PKC and TK pathways, G-protein coupled receptors and mechanisms of gene activation and repression. Demonstrated experience in protein purification, enzymology, and gene expression is highly desirable. **Refer to position # S-IDR-1**

## **Ph.D. Macrophage Cell Biologist**

This individual will have primary responsibility for discovering and developing new drugs for therapeutic targets distinctive to the human macrophage. The successful candidate must have a Ph.D. with at least two years postdoctoral experience, specifically related to the study of macrophage cell biology or biochemistry, and possess a wide range of knowledge and interest in macrophage biology in terms of cell activation and differentiation. **Refer to position # S-IDR-2**

## **Ph.D. Animal Pharmacologist**

Ph.D., M.D. or D.V.M. and a minimum of 2-5 years of relevant experience in the area of animal pharmacology as it applies to the development and characterization of animal models of inflammation and autoimmune disease. This person will lead a group of scientists in mechanism-based approaches to develop innovative therapeutic agents to treat chronic inflammatory diseases. Candidates should have a working knowledge of inflammation/immunology. Strong oral/written communication skills and versatility are essential. **Refer to position # S-IDR-3**

## **M.S./B.S. Animal Pharmacologist**

B.S./M.S. with a minimum of 2-5 years of relevant experience in the area of animal pharmacology as it applies to the development and characterization of animal models of inflammation and autoimmune disease. Mechanism-based approaches to develop innovative therapeutic agents to treat chronic inflammatory diseases will be pursued. Candidate should have a working knowledge of inflammation/immunology. This person will provide skilled technical support as a member of a team where communication skills and versatility are essential. **Refer to position # S-IDR-4**

## **M.S./B.S. Molecular Biologists**

We are seeking individuals with solid records of laboratory experience in eukaryotic molecular cell biology. Broad technical experience in DNA and RNA analyses, expression systems, radiolabeling methods, PCR methodologies, site-directed mutagenesis techniques, cell and tissue culture, and various protein methods is desired. The successful candidates must be able to effectively employ the scientific literature in the design, execution, and management of multiple experimental approaches. **Refer to position # S-IDR-5**

Our Wilmington, Delaware R&D facilities are located in northern Delaware, with abundant recreational opportunities, uncongested living, and access to Mid-Atlantic cultural and academic facilities.

We offer competitive salaries and benefits and encourage female and minority candidates to apply. Our company is dedicated to the continued growth and development of our most important resource, the people of DuPont Merck.

Please send a letter of introduction, resume, and list of publications to: Excalibur Human Resources, Department S-IDR-1-5, Princeton Corporate Center, 5 Independence Way, Princeton, NJ 08540. No phone calls please. An Equal Opportunity Employer. M/F/D/V.

DU PONT  
MERCK



# SCIENCE

## PERSONNEL PLACEMENT

### LINE CLASSIFIED ADVERTISEMENTS

- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Advertisements must be submitted in writing.
- **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training.
- **Mail or FAX materials to:**  
*Science* Classified Advertising  
 1333 H Street, N.W., Room 814  
 Washington, DC 20005  
 Telephone: 202-326-6555  
 FAX: 202-682-0816
- **Rates:** Ads are \$43 per line; \$430 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads.
- **Ads from Outside the U.S.:** A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Annemarie Vis at +44 223 302 067 (telephone) or +44 223 302 068 (FAX).
- **Credit Cards:** *Science* accepts MasterCard and VISA. Discount does not apply to credit cards.
- **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

### DISPLAY PERSONNEL ADVERTISEMENTS

For rates and info. about fractional display ads (all ads 1/2 page and larger), contact:

Recruitment Advertising  
 Deborah Cummings  
 Telephone: 202-326-6541

Janis Crowley, Recruitment  
 Advertising Manager  
 Telephone: 212-496-7704  
 FAX: 202-682-0816

Annemarie Vis  
 European Recruitment Advertising  
 Telephone: +44 223 302 067  
 FAX: +44 223 302 068

**CONDITIONS:** Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

## POSITIONS OPEN

### ASSISTANT PROFESSORS

Departments of Neuro-Oncology,  
 Neurosurgery, and  
 Brain Tumor Center

Tenure-track positions available for a Ph.D. or M.D./Ph.D. with experience and expertise in conducting laboratory research in molecular and cellular biology with specific emphasis in one or more of the following areas: signal transduction, tumor suppressor genes, protein tyrosine kinases, extracellular matrix, tumor invasion, or molecular strategies for solid tumor therapy. Experience with brain tumors is encouraged but not required. Salary and benefits are highly competitive. Send curriculum vitae, summary of research interests, and references to: **Victor A. Levin, M.D., Department of Neuro-Oncology-Box 100, University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.**

*Equal Opportunity/Affirmative Action Employer. Smoke-free environment.*

**ENDOWED CHAIR IN BIOLOGY:** tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** to teach microbiology, general biology and supervise student research; enrich environmental minor; conduct research. For details contact: **Dr. Ann Henninger, Wartburg College, Waverly, IA 50677. FAX: 319-352-8582.** Wartburg is an accredited 4-year, coeducational liberal arts college of the Lutheran Church (ELCA). *Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION MEDICINAL AND NATURAL PRODUCTS CHEMISTRY COLLEGE OF PHARMACY UNIVERSITY OF IOWA

The Division of Medicinal and Natural Products Chemistry of the College of Pharmacy invites applications for a 12-month, tenure-track faculty position in synthetic medicinal chemistry preferably at the **ASSISTANT PROFESSOR** level. Applicants must hold the Ph.D. degree in medicinal or synthetic organic chemistry. Postdoctoral experience is required. Candidates are expected to bring contemporary chemical, biochemical and/or pharmacologic approaches necessary to establish and maintain a rigorous, extramurally funded research program relating to the design, synthesis, and mechanism of action of biologically active substances. The successful applicant is expected to participate in team-taught undergraduate courses, to develop and teach graduate course offerings and to attract graduate students to the Ph.D. program. *Minorities and women are encouraged to apply.* Applications will be received until the position is filled. Interested applicants should submit curriculum vitae; a statement indicating areas of research interest; and three letters of reference to: **Professor C.F. Barfknecht, Chair, Medicinal and Natural Products Chemistry Faculty Search Committee, College of Pharmacy, University of Iowa, Iowa City, IA 52242; Telephone: (319) 335-8830, FAX: (319) 335-8766.** *The University of Iowa is an Affirmative Action and Equal Opportunity Employer.*

### FACULTY POSITION

Department of Molecular and Medical Genetics  
 Oregon Health Sciences University (OHSU)  
 Portland, Oregon

Applications are invited for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The Department seeks individuals who have demonstrated excellence in research. Preference will be given to candidates with interests in eukaryotic molecular, cellular or developmental genetics. Applicants should have an M.D. or Ph.D. degree and include curriculum vitae, a brief description of research accomplishments, a brief description of future research goals, and the names of three references. Please address applications to: **R. Michael Liskay, Department of Molecular and Medical Genetics, L103, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098.** *OHSU is an Equal Employment Opportunity/Affirmative Action Employer (UPAR#1656).*

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF BIOLOGY

Antioch College seeks applicants and nominees for a tenure-track position as an Assistant Professor of Biology to begin September 1, 1994.

We seek a person with a strong commitment to liberal arts undergraduate teaching and to the involvement of students in research. The successful candidate would teach courses such as animal physiology, environmental physiology, cell biology, and general biology. The candidate should be able to incorporate recent technology in teaching and serve as a pre-medical advisor.

*Antioch College, as an Equal Employment Opportunity Employer, aggressively practices Affirmative Action in all its activities, from the admission of students, to all educational programs, and to the hiring, promotion and tenure of all employees. In the interest of enriching its diverse community Antioch encourages racial and ethnic minorities, women, and people of all sexual orientations to apply.*

Send nominations and applications, including three references to: **R. Eugene Rice, Dean of Faculty, Antioch College, 795 Livermore Street, Yellow Springs, OH 45387.** The process of reviewing applicants will begin April 1, 1994. *An Affirmative Action/Equal Employment Opportunity Employer.*

New Mexico Highlands University is seeking applications in **ENVIRONMENTAL SCIENCE** to fill a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level effective August 15, 1994. Includes research and teaching at the undergraduate and graduate levels. Ph.D. or substantial progress towards Ph.D. required. Competence in areas of environmental regulations and impact studies, applied ecology emphasizing environmental restoration, and risk management is also required. Prior teaching experience and grant generating ability desirable. Application should include letter of intent, résumé, official transcripts, and three letters of recommendation with telephone numbers. Application Deadline: May 15, 1994, or until filled. Address application and inquiries to: **Environmental Science Search Committee, Department of Life Sciences, New Mexico Highlands University, Las Vegas, NM 87701.** For disabled access or services, call (505) 454-3263; or TDD # (505) 454-3003. *New Mexico Highlands University is an Affirmative Action/Equal Employment Opportunity Employer.*

### ASSISTANT PROFESSOR

**VISUAL NEUROPHYSIOLOGIST.** The Department of Ophthalmology, West Virginia University, invites applications for a tenure-track position available in the summer of 1994, with a joint appointment in the Department of Physiology. We seek a Ph.D. with 2 years of postdoctoral training and a strong publication record. The appointee will participate in the institution's planned expansion of neuroscience. The Health Sciences Center has state-of-the-art research facilities, and a PET scanning center is under development. The clinical electrophysiology laboratory (ERG, EOG, VEP, psychophysical testing) can also be used for research. Salary, space, and start-up money will be commensurate with qualifications. The appointee will be expected to establish an independent research program and provide research training for clinical residents and graduate students. Send curriculum vitae, reprints of recent publications, a brief statement of future research plans, and list of three references by April 15, 1994, to: **Dr. Paul Brown, Department of Physiology, West Virginia University Health Sciences Center, Morgantown, WV 26506.** *West Virginia University is an Affirmative Action/Equal Opportunity Employer.*

**COMPARATIVE PHYSIOLOGIST.** Ph.D. required for a 9-month, tenure-track appointment at the **ASSISTANT PROFESSOR** level. A strong commitment to undergraduate teaching and research is essential. Main responsibility is to teach Human Anatomy and Physiology. Send résumé, application letter, and names, addresses and telephone numbers of three references to: **Dr. Tom Soniat, Department of Biology, Nicholls State University, Thibodaux, LA 70310.** Deadline is April 11, 1994. *NSU is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS Department of Biological Sciences WELLESLEY COLLEGE

The department of Biological Sciences at Wellesley College, a liberal arts institution located ten miles west of Boston with a student body of 2200, invites applications for four leave-replacement positions, three full-time and one part-time, to be filled by September 1994. These will be one-year, non-tenure-track appointments at the level of ASSISTANT PROFESSOR.

Persons filling these positions will teach introductory biology, plus some combination of intermediate or advanced courses in (1) **Animal Physiology**; (2) **Ecology and Horticultural Science**; (3) **Neurobiology**; and (4) **Cell/Molecular Biology**. An ability to teach **Histology** would be a plus for one position.

Candidates for these positions should hold the Ph.D. For each position, we seek applicants who can demonstrate a commitment to the teaching of undergraduates. Because of space limitations, research on-site will be possible but difficult, and will not be expected for these positions.

Credentials will be reviewed when complete. Applicants should send curriculum vitae, graduate transcript, a statement of teaching experience, one letter of recommendation and the names of two additional references to: **Dr. John S. Cameron, Search Committee Chair, Department of Biological Sciences, Wellesley College, Wellesley, MA 02181**, by April 15, 1994.

*Wellesley College is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT OR ASSOCIATE PROFESSOR POSITION

#### Markey Center for Molecular Genetics Department of Microbiology and Molecular Genetics University of Vermont

The Department of Microbiology and Molecular Genetics at the University of Vermont has expanded greatly over the past several years to develop an interactive department of twenty full-time faculty. We are housed in a new building with modern teaching and research facilities. As part of a long-term commitment to expand our department, we are seeking an outstanding molecular geneticist or microbiologist for a position as Assistant or Associate Professor who would thrive and participate in an interactive and cooperative environment. Candidates with a broad range of research interests will be considered.

Interested candidates should submit an application, including curriculum vitae and a description of research interests, and request that three references be sent to: **Dr. Janet Kurjan, Department of Microbiology and Molecular Genetics, University of Vermont, College of Medicine and College of Agriculture and Life Sciences, Burlington, VT 05405**. This position will remain open until filled.

*The University of Vermont is an Equal Opportunity/Affirmative Action Employer; women and people from diverse racial, ethnic, and cultural backgrounds are encouraged to apply.*

### ASSISTANT PROFESSOR OF BIOLOGY

Tenure-track position to teach genetics courses in Biology and develop a viable research program in eukaryote molecular genetics. Ph.D. and postdoctoral experience required. Research specialty must be compatible with existing Ph.D. program in Molecular Biology. Appointment effective September 1994 or as negotiated. Send application, curriculum vitae, names, addresses and telephone numbers of at least three references to: **Dr. Fritz Schwalm, Department of Biology, P.O. Box 23971, Denton, TX 76204**. Telephone: 817-898-2351 or FAX: 817-898-2382. Have three letters of recommendation sent directly to the same address. Screening of applications will begin April 11, 1994, and continue until position is filled.

*Texas Woman's University is a state-supported University and is an Equal Opportunity Employer.*

## POSITIONS OPEN



### UNIVERSITY of OXFORD

#### PROFESSORSHIP OF BIOLOGICAL ANTHROPOLOGY

The electors intend to proceed to an election to the Professorship of Biological Anthropology with effect from 1 October 1994 or such later date as may be arranged. The stipend of the professorship is at present £34,984 per annum. A non-stipendiary professorial fellowship at Linacre College is attached to the professorship.

Applications (ten copies, or one only from overseas candidates), naming three referees, should be received not later than 30 March 1994 by the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, from whom further particulars may be obtained.

*The University is an Equal Opportunity Employer.*

#### ASSISTANT/ASSOCIATE PROFESSOR ANATOMY AND CELL BIOLOGY

Applications are invited for a tenure-track position in the Department of Anatomy and Cell Biology, University of North Dakota School of Medicine. Applicants must hold a Ph.D., M.D. or equivalent with at least two years of postdoctoral training and research experience in Cell Biology, Molecular Biology or related areas. The successful candidate will be expected to carry on a vigorous, extramurally funded research program in his/her respective field. A demonstrated potential to collaborate with clinical researchers will be important for the successful candidate. Applicants should possess expertise in Human Gross Anatomy and be willing to contribute substantially to a team-taught Human Gross Anatomy course for medical students. A major teaching contribution in the Departmental Graduate Program is also required. Send curriculum vitae, descriptions of research and teaching experience and three letters of reference by May 15, 1994, to: **Dr. Jean C. Oberpriller, Chair, Anatomy and Cell Biology Search Committee, Department of Anatomy and Cell Biology, University of North Dakota School of Medicine, Grand Forks, ND 58202**. *The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

#### HARVARD MEDICAL SCHOOL CENTER FOR BLOOD RESEARCH ASSOCIATE PROFESSOR

The Department of Pathology at Harvard Medical School and the Center for Blood Research are jointly seeking to fill an Associate Professorship. The candidate is expected to direct a vigorous, independent research program. The field of search is endothelial biology and thrombosis. The position offers significant scientific and scholarly resources, a collegial environment, and the candidate will participate in teaching graduate and medical students.

Candidates should send curriculum vitae and statement of research interests, and three references to: **Professor Timothy A. Springer, Search Committee Chair, Center for Blood Research, Box 4, Room 251, 200 Longwood Avenue, Boston, MA 02115**.

*Harvard Medical School is an Affirmative Action/Equal Opportunity Employer. Qualified female and minority applicants are encouraged to apply.*

#### POSITION IN BIOLOGICAL SCIENCES Wagner College, Staten Island, New York

##### ASSISTANT PROFESSOR, BIOLOGICAL SCIENCES, EFFECTIVE FALL 1994

**Qualifications:** Ph.D. in Biology. Responsibilities include teaching undergraduate courses in general biology, botany, zoology, ecology; developing and overseeing student research. Send cover letter, curriculum vitae, three letters of recommendation, official transcript to: **Dr. Kathleen A. Bobbitt, Chair, Department of Biological Sciences, Wagner College, Staten Island, NY 10301**. *Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR

The Department of Fisheries and Wildlife at Oregon State University (OSU) invites applications for a 12-month, 0.75 FTE tenure-track faculty position at the Assistant/Associate level. Requirements include a Ph.D. in fisheries or related field, and demonstrated ability in teaching, research and grantsmanship. Responsibilities include teaching fishery biology, introductory population dynamics, and resource ecology, establishing a research program involving graduate students, advising undergraduate students, and support of the university's mission of extended education. Send professional résumé, letter of application addressing your qualifications, and three recommendation letters by April 15, 1994, to: **Dr. Douglas Markle, Department of Fisheries and Wildlife, Nash 104, Oregon State University, Corvallis, OR 97331-3803**. *OSU IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER AND HAS A POLICY OF BEING RESPONSIVE TO THE NEEDS OF DUAL-CAREER COUPLES.*

**ASSISTANT PROFESSOR OF BIOLOGY:** Full-time, academic year (9-month), tenure-track position commencing September 7, 1994, to participate in undergraduate program. We are seeking an applied microbiologist with the ability to teach plant physiology and/or cell biology. The successful candidate may be asked to participate in the introductory biology sequence, introductory genetics and/or the environmental science program. Commitment to quality teaching, advising, and direction of undergraduate research is necessary. Salary commensurate with qualifications.

**QUALIFICATIONS:** Doctoral degree in Biological Sciences (or related field) and evidence of teaching excellence desired. ABD's will be considered.

Applicants should submit a letter of application, résumé, and three letters of reference to the: **Office of Employee Relations, Administration Building, Lake Superior State University, Sault Ste. Marie, MI 49783**.

Review of applications will begin April 15, 1994; applications will be accepted until the position is filled.

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

#### DEPARTMENT OF OBSTETRICS, GYNECOLOGY AND REPRODUCTIVE SCIENCES UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE ASSOCIATE PROFESSOR

A full-time faculty position is available for a basic scientist in the Department of Obstetrics, Gynecology and Reproductive Sciences at the University of Pittsburgh School of Medicine beginning June 1, 1994. The successful candidate should be experienced in renal, trophoblast and smooth muscle physiology. Experience and the ability to work independently are required, as is the willingness and ability to teach and train postdoctoral fellows and graduate students. The academic rank is at the Associate Professor level. Salary will be commensurate with experience, training and achievements.

Send inquiry and curriculum vitae by April 30, 1994, to:

**James M. Roberts, M.D.  
Professor and Vice-Chair, Research  
Department of Obstetrics, Gynecology  
and Reproductive Sciences  
University of Pittsburgh School of Medicine  
Magee-Womens Hospital  
300 Halket Street  
Pittsburgh, PA 15213-3180**

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

**Limnology/Wastewater Utilization/Water Pollution. ASSISTANT PROFESSOR**, two-year temporary position. Requires Ph.D. Knowledge of wastewater treatment/reuse and aquaculture desirable. Duties include teaching, research, and coordinating Wastewater Utilization M.S. program. Submit curriculum vitae, transcripts, research interests, and three letters of recommendation by April 8, 1994, to: **Search Committee, Department of Fisheries, Humboldt State University, Arcata, CA 95521**; Telephone: 707-826-3953, FAX: 707-826-4060. *Humboldt State University is an Affirmative Action/Equal Opportunity Employer.*

## You Can Judge A Company By The Clarity Of Its Vision.

At Abbott, we've never swayed in our mission to provide advanced, cost-effective health care products and services—not in over 100 years. Today, you could join us in one of the world's most sophisticated research environments.

### BIOCHEMICAL ENGINEER Fermentation and Protein Expression

You will use and develop fermentation techniques with microbial hosts to achieve routine high-level expression of recombinant proteins for structure-function studies. This important work will be performed in close collaboration with Protein Biochemists, Molecular Biologists, X-ray Crystallographers, and Protein NMR Spectroscopists.

We require a PhD in Biochemical Engineering, Biochemistry or Microbial Physiology, and 2-5+ years of industrial/academic experience in hands-on microbial fermentation for expression of recombinant proteins at the 1-10L scale. Experience at larger scales would be a plus. Skills in molecular biology for maximizing microbial gene expression are also desirable. You must be able to work in a multidisciplinary environment.

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area, approximately 30 miles north of Chicago. For confidential consideration, please send a resume and salary history to: Patricia Handy, D-393, J30, Job# TH69085, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer.

#### ABBOTT LABORATORIES



Quality  
Health Care  
Worldwide  
1888-1994

*Experience The Abbott Edge.*

### Department of Energy Human Genome Program Announcement

Program Notice 94-12: Human Genome Program - Technological Advances

The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE), hereby announces\* its interest in receiving applications in support of the Human Genome Program. This Program is a coordinated, multidisciplinary, goal oriented research effort aimed at improving technologies that will lead to a detailed understanding of the human genome at the molecular level. Several research goals are encompassed in this notice, with collaborative, multidisciplinary efforts specifically encouraged. Research will be supported for the development of: 1) integrated approaches to large-scale human genome sequencing that may include supportive mapping and automation; 2) cost-effective DNA sequencing systems that promise more than a 10-fold improvement in throughput; 3) software and resources for real-time analysis and annotation of data from high-speed DNA sequencing systems; 4) resources for facile entry and retrieval of data in community genome maps and DNA sequence databases, including coordinated entry or retrieval across multiple, complementary databases.

Potential applicants are strongly encouraged to submit a brief preapplication that consists of two to three pages of narrative describing the research project objectives and methods of accomplishment. Telephone and FAX numbers are required and electronic mail addresses are desirable. The preapplications will be reviewed relative to the scope and research needs of the DOE's Human Genome Program. They should be received by April 15, 1994. The 1st class US mail address is: Dr. David A. Smith, attn. Program Notice 94-12, Office of Health and Environmental Research, ER-72 (GTN), Washington, DC 20585. For express deliveries, address to D.A. Smith (phone# 301/903-6488), attn. 94-12, US Dept. of Energy, 19901 Germantown Road, Germantown, MD 20874. For electronic mail use genome@oerhp01.er.doe.gov (in ASCII text only please). A response to the preapplications discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt. Materials for preparation of the formal applications will be returned with the responses. Formal applications are due July 14, 1994.

\*The full text of Program Notice 94-12: Human Genome Program-Technological Advances is in the FEDERAL REGISTER, Vol. 59, No. 34, Feb. 18, 1994, p8183-4.

## Pharmaceutical Peptides, Inc.

is a newly-formed, well-financed biotechnology company dedicated to the development of novel drug substances in a wide variety of therapeutic areas. Peptides and related molecules derived from chemical and biological libraries will serve as cornerstones of novel methodologies for drug discovery.

The Company, located in Cambridge, Massachusetts, has been founded by three leading scientists with the financial support of a group of prestigious investors. It now seeks to hire individuals with a strong desire to participate in the rapid growth of an entrepreneurial company. Compensation will be in the form of salary as well as an attractive stock option package.

### Director of Chemistry (Ph.D. or M.D.)

This senior level position is responsible for all chemistry within the Company and will report to the Director of Research. Should have at least 5 years, post-degree, of industrial or academic research experience leading a group in the areas of protein, peptide or medicinal chemistry.

### Director of Cell Biology (Ph.D. or M.D.)

This senior level position will be responsible for cellular research and development in all therapeutic areas involving gene expression and characterization of novel molecules affecting biological processes, and will report to the Director of Research. The individual should have at least 5 years, post-degree, of industrial or academic research experience leading a group in the field of cell biology with emphasis on molecular biology or biochemistry.

### Senior Technologist

This senior level position will report to the Company's Director of the appropriate research department. Should have at least 10 years' experience in either molecular biology or chemistry, and be able to work effectively with senior level scientists in all areas of the Company's research.

Qualified individuals should send their resumes, a list of references, and two of their most important publications to Dr. Ethan Signer, MIT 56-445, 77 Massachusetts Avenue, Cambridge, MA 02139-4307.

An Equal Opportunity/Affirmative Action Employer.

**Pharmaceutical  
Peptides, Inc.**

## Carnegie Mellon University and the University of Pittsburgh Announce the Creation of the Center for the Neural Basis of Cognition

The Center is dedicated to the study of the neural basis of cognitive processes, including learning and memory, language and thought, perception, attention, and planning; to the study of the development of the neural substrate of these processes; to the study of disorders of these processes and their underlying neuropathology; and to the promotion of applications of the results of these studies to artificial intelligence, technology, and medicine. The Center will synthesize the disciplines of basic and clinical neuroscience, cognitive psychology, and computer science, combining neurobiological, behavioral, computational and brain imaging methods.

### Faculty Openings in the Center

The Center seeks faculty and research scientists whose work relates to the mission stated above. Recruiting is beginning immediately, and will continue for several years. Appointments can be at any level and will be coordinated with one or more departments at either university.

Coordinating departments include Biological Sciences, Computer Science, and Psychology at Carnegie Mellon and the departments of Behavioral Neuroscience, Neurobiology, Neurology, Psychiatry and Psychology at the University of Pittsburgh. Other affiliations may be possible.

Candidates should send an application to either of the Co-Directors of the Center, listed below. The application should include a statement of interest indicating how the candidate's work fits the mission of the center and suggesting possible departmental affiliations, as well as a CV, copies of publications, and three letters of reference. Both universities are EEO/AA Employers.

James L. McClelland  
Department of Psychology  
Baker Hall 345-F  
Carnegie Mellon University  
Pittsburgh, PA 15213

Robert Y. Moore  
Center for Neuroscience  
Biomedical Science Tower 1656  
University of Pittsburgh  
Pittsburgh, PA 15261

## ALPHAGENE

AlphaGene is a new biotechnology company which develops high-quality and innovative gene libraries for the emerging biotechnology industry, utilizes these libraries for genetic expression studies contracted by the pharmaceutical industry, and develops novel approaches in the biologic and genetic analysis of human disease.

AlphaGene will recruit highly-motivated molecular biologists for the following positions:

### POSTDOCTORAL SCIENTIST/RESEARCH ASSOCIATE

Candidates must possess a Ph.D. degree in molecular biology with extensive experience in cloning, DNA sequencing, and expression of heterologous genes in prokaryotic and eukaryotic cells. Experience in the synthesis of gene libraries, PCR, and in-situ mutagenesis is highly desirable. Scientific talent, achievement focus, and teamwork skills are a must.

AlphaGene, founded by scientists at Harvard Medical School, is located in Cambridge, MA, amidst strong academic institutions and a growing community of "leading-edge" biotechnology companies. AlphaGene offers a competitive salary, a generous benefits package, opportunities for growth, and an "environment of excellence" for professional and commercial success. Qualified candidates are requested to submit, in confidence, a cover letter, their curriculum vitae, and two references to: **Dr. George Scheele, AlphaGene Resources, 60 Glen Road, Suite 302, Brookline, MA 02146. An Equal Opportunity Employer M/F/D/V.**

## HEALTH SCIENTIST ADMINISTRATOR (HSA) GS-601-12/13/14 GM-94-0006

The National Institute of General Medical Sciences, National Institutes of Health, Bethesda, MD is seeking a HSA, responsible for stimulating, planning, advising, directing, and evaluating program activities for (1) a portfolio of research grants in the areas covering the structure and function of proteins, nucleic acids, and protein nucleic acid complexes and (2) a portfolio of institutional training grants in the area of molecular biophysics.

Applicants should be physical biochemists with an appreciation of the role of molecular structure in the biological processes. In addition, applicants must possess specific knowledge, skills and abilities (KSAs) in order to qualify for this position. There are a number of documents that must be submitted when applying for this position. Applicants who fail to submit all of the required documents will not be considered for the position; therefore, it is crucial that applicants call to obtain this information.

For information regarding the qualifications and application requirements, please call the NIGMS Personnel Office on (301) 594-7767. TDD: (301) 594-8884.

Announcement closes 4/11/94.

U.S. Citizenship is required.  
NIH is an Equal Opportunity Employer

## OSTEOARTHRITIS RESEARCH, Ph.D.

Wyeth-Ayerst Laboratories, a Division of Fortune 100 American Home Products Corporation, is seeking a creative scientist with research experience in cartilage biochemistry and chondrocyte biology to initiate a drug discovery program in Osteoarthritis.

The successful candidate will possess a proven track record of innovative research and will have a clear vision of future molecular-based drug discovery opportunities in the Osteoarthritis arena. Collaboration with other investigators and maintenance of an active presence in the scientific community will be expected. Qualifications include a Ph.D. in one of the Biological/Medical Sciences plus a minimum of 3 years experience after the doctoral degree. Well-developed interpersonal and verbal/written communication skills are required, as is the motivation to publish novel and innovative research findings.

Wyeth-Ayerst offers competitive salaries and excellent benefits. Candidates should send resume to: **WYETH-AYERST RESEARCH, Human Resources Department, Position #423, CN 8000, Princeton, NJ 08543-8000. Equal Opportunity Employer, M/F/D/V.**

 **WYETH  
AYERST**  
*Leading The Way for a Healthier World*





## Associate Dean for Research

The Office of Research Development

The Bowman Gray School of Medicine of Wake Forest University seeks an associate dean for research for The Office of Research Development. The candidate must have an M.D. or Ph.D. (or equivalent) and evidence of substantial accomplishments in biomedical research. Experience should include at least seven years in research development or administration, program planning and evaluation of research activities, and demonstrated leadership abilities in the biomedical research community. The associate dean is the principal advocate for research within the administration and chief institutional spokesperson for research issues. Responsibilities include development of strategies to capitalize on research opportunities in public and private sectors; providing liaison activities to federal agencies and new/existing sources of research funding; and direction, performance and quality of all programmatic activities of The Office of Research Development which include the execution of research grants and contracts and assurance that research activities comply with institutional and governmental regulations.

Please send curriculum vitae to attention of:

Dr. Curt D. Furberg, Chairman, search committee  
(910-716-2498)

Department of Public Health Sciences  
The Bowman Gray School of Medicine  
Medical Center Boulevard  
Winston-Salem, NC 27157

**WAKE FOREST**  
**UNIVERSITY**

The Bowman Gray School of Medicine is an equal  
opportunity/affirmative action employer



# Washington

WASHINGTON UNIVERSITY IN ST. LOUIS

## Biology & Biomedical Sciences

Graduate and postdoctoral training  
opportunities in...

### Protein Design and Function

**Douglas Covey** - Determination of covalent adducts formed during enzyme inactivation by mechanism-based enzyme inhibitors.

**Enrico Di Cera** - Thermodynamics of molecular recognition.

**Carl Frieden** - Protein folding, protein-protein interactions, and structure function relationships of enzymes.

**Scott Gilbertson** - Development of asymmetric catalysts through the utilization of peptide secondary structure.

**Linda Kurz** - Catalytic strategies; enzyme mechanisms.

**Angel Lee** - Molecular and cell biological and biophysical studies of receptor tyrosine kinases.

**Garland Marshall** - Molecular recognition and drug design; conformation of peptides; protein chemistry.

**Kevin Moeller** - New synthetic organic methods; development of novel synthetic routes for the construction of medicinally useful rigid peptide analogs.

**Jay Ponder** - Computational and experimental models of protein mechanics, dynamics, and folding.

**George Rose** - Protein folding, structure, and dynamics; structural motifs.

**Jacob Schaefer** - NMR methods in solids with applications to characterization of protein binding sites.

**Gabriel Waksman** - X-ray crystallographic studies of proteins involved in signal transduction

...and others

Please direct inquiries for postdoctoral training to specific faculty members. For graduate school information, please write to: Biology & Biomedical Sciences, Campus Box 8226, 660 S. Euclid Ave., St. Louis, MO 63110-1093; or call 800-852-9074.

# Procaryotic Molecular Biology Research Assistant

## Join the Growth. Join the Success.

Pfizer, a Fortune 100 company, one of the largest pharmaceutical companies in the world and a multi-million dollar industry leader, can offer you a world of challenge, opportunity and achievement where you can make a significant contribution to the research and development of exciting new products to be introduced in the coming decade...and the new century.

Pfizer Central Research Laboratories in Groton, Connecticut are the company's primary U.S. research facilities committed to creating a healthier world population. In addition, the Central Research Laboratories represent one of only a handful of R&D organizations with a budget over \$1 billion to support continued advances in science.

To accomplish that goal we are actively seeking a highly motivated research assistant in our Animal Health Discovery Biology group. The successful candidate will be involved in a team effort to discover novel classes of antibacterial agents using tools of microbiology and molecular genetics. Responsibilities will include bacterial growth determination, including assays of inhibition of diverse aspects of bacterial physiology; virulence, phosphate utilization, and nitrogen metabolism; design of cell-free and whole cell assays; and bacterial strain and vector construction, Southern analysis, transformation and electroporation.

This position requires a BA/BS or MA/MS in molecular biology and previous experience with modern techniques in bacterial genetics including strain construction, mutant analysis, cloning and gene expression. Knowledge of electroporation techniques and PCR is desirable.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, savings and investment plan, pension plan, relocation assistance and more. Our R&D facility located in a southeastern Connecticut shore community gives access to the well known academic and cultural centers of the Northeast and offers the attractions of a New England lifestyle.

To learn how you can be part of the future of Pfizer, send your resume to: **Mr. Charles P. Norris, Assistant Manager, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



**Central Research**  
Bringing science to life.



Cell Therapeutics, Inc. is an innovative biopharmaceutical company focused on the design and commercial development of drugs that treat significant human diseases. We currently have the following opportunities available:

### **GROUP LEADER/SENIOR SCIENTIST, VASCULAR BIOLOGY ANGIOGENESIS**

The successful candidate will lead a scientific team to optimize and develop a compound for treatment of vascular diseases, such as restenosis, reperfusion injury and proliferative retinopathies. Requirements include a PhD and a minimum of 5 years' industry or relevant experience in endothelial or smooth muscle cell biology. **Reference Number JS1943B.**

### **GROUP LEADER/SENIOR SCIENTIST, CELLULAR IMMUNOLOGY**

CTI is developing synthetic, orally-active phospholipid signaling inhibitors that block IL-2 and CD28-mediated signal transduction. The successful candidate will act as a team leader for an aggressive development program. This position requires a PhD/MD with a minimum of 5 years' academic or industry experience in cellular immunology, a distinguished record of accomplishments, direct experience with animal model of autoimmune diseases and proven administrative skills. **Reference Number JS1941B.**

### **SENIOR SCIENTIST, PHARMACOLOGY/METABOLISM**

The successful candidate will be responsible for pharmacology, metabolism and development issues, performance of pharmacokinetic and formulation analysis, and preparation of pharmacology section of INDs. Qualifications include a PhD in Pharmacology with a minimum of 5 years' industry experience and excellent communication/management skills. **Reference Number JS1942B.**

### **PUBLIC/INVESTOR RELATIONS DIRECTOR**

The selected individual will be responsible for developing and directing programs to promote CTI's image. This will include internal and external communications and acting as the liaison to the investment community, media, general public and corporate alliances. Candidates must have BA/MBA with a minimum of 8 years' experience in corporate communications and investor relations. Biotechnology experience preferred. **Reference Number JAB1941B.**

CTI's location in downtown Seattle provides spectacular views and easy access to all areas. We also offer an attractive compensation and benefits package as well as an environment where your contributions can make a significant difference. Please send or FAX your CV, referencing Job Number, to:

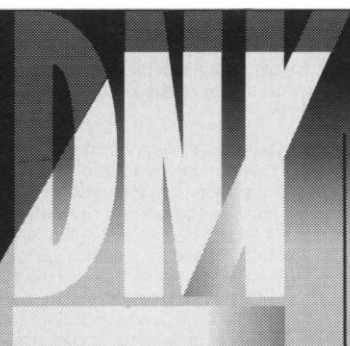
**Human Resources  
Cell Therapeutics, Inc.  
201 Elliott Avenue West, Suite 400  
Seattle, WA 98119  
FAX (206) 284-6206**

*We'll be at the Biotechnical Job Fair,  
March 25 & 26 in La Jolla, California*

*Equal Opportunity Employer*



**DNX**, the established leader in transgenic sciences is revolutionizing pharmaceutical evaluation in animal models, including the development of enhanced biological models and systems for use in drug discovery, chemical safety testing, and transgenic pharmaceutical production.



### **TRANSGENICS- MICROINJECTIONIST**

An immediate opening exists in our transgenic animal facility for a BS level Research Associate/Microinjectionist with two+ years microinjection experience, preferably in a service setting. Must be skilled in DNX pronuclear injection and/or ES cell manipulation.

DNX offers an excellent working environment, competitive compensation and benefits package, and ideal location (midway between New York and Philadelphia) in historic Princeton, New Jersey.

Qualified applicants are invited to submit a resume by telefax to:



**Human Resources  
DNX Corporation  
609-520-9864**

*Equal Opportunity Employer*

## **UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM**

### **Assistant Professor - Molecular 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 interdepartmental 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 and the development of vaccines and antiviral drugs. These studies focus on retroviruses, including HIV and SIV, (senior faculty: E. Hunter, B. Hahn, G. Shaw, P. Fultz, C. Morrow), influenza viruses (G. Air, M. Luo), picornaviruses (M. Luo, C. Morrow), VSV and respiratory syncytial virus (G. Wertz), vaccinia virus and nodaviruses (L.A. Ball), adenoviruses (J. Engler), papilloma viruses (T. Broker, L. Chow), and herpesviruses (R. Whitley, W. Britt). The successful applicant could provide expertise in a new area or extend one of the existing programs. Applications and inquiries should be sent to one of the co-chairs of the Search Committee by April 15th 1994, and should include a curriculum vitae, a brief description of past accomplishments and future research plans, and the names and addresses of three references:

**Dr. Andrew Ball or Dr. Eric Hunter  
Department of Microbiology  
University of Alabama at Birmingham  
UAB Station  
Birmingham, AL 35294  
Telephone (205) 934-4321**

*UAB is an Affirmative Action/Equal Opportunity Employer*

# People Making A Difference

**Liposome Technology, Inc. (LTI)** is engaged in the development, manufacture, marketing, and sale of proprietary liposome and lipid-based products to treat life-threatening diseases.

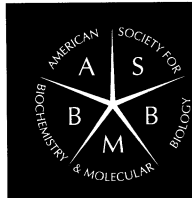
We have made considerable investments into Research and Development and have added some of the pharmaceutical industry's top talent to our employee roster. Today we are positioned for further growth and prosperity. If you are a dedicated and qualified professional seeking meaningful employment, now's the time to consider LTI.

**LTI** is a progressive company dedicated to providing its employees with a professional, yet friendly, working environment and competitive salaries/benefits. Please send your resume to: **Liposome Technology, Inc., Professional Staffing, 960 Hamilton Court, Menlo Park, CA 94025**, or fax to: **(415) 324-3928**.



Principals only. No phone calls please. We are an equal opportunity employer

## Women and Minorities in Science: Successes in Industry and Academia



You are invited to attend a special panel at the ASBMB Annual Meeting, sponsored by the ASBMB Subcommittees on Equal Opportunities for Women and Equal Opportunities for Minorities.

**PANELISTS:** Dr. Shirley Malcolm, AAAS  
Dr. Evelyn DeLiso, Corning, Inc.  
Dr. Robert Simoni, Stanford University

**DATE:** Tuesday, 24 May 1994  
**PLACE:** Washington, D.C. Convention Center  
**TIME:** 12:15-2:00 p.m.

Other activities of the ASBMB Subcommittee on Equal Opportunities for Women include publication and distribution of a Directory of Women Scientists and a mentor-matching program.

For more information, please contact:

**ASBMB Meeting Office**

**9650 Rockville Pike**

**Bethesda, MD 20814-3998**

**Tel: 301-530-7010 Fax: 301-530-7014**



**Wellcome**

## SENIOR CLINICAL RESEARCH SCIENTIST ANTI-INFECTIVE DEVELOPMENT

At Burroughs Wellcome Co., you can discover your full potential for scientific research in an atmosphere where you will have access to world-renowned expertise. The result is an opportunity to extend the boundaries of knowledge, and enhance your skills. Discover your capabilities at Burroughs Wellcome Co.

The Department of Infectious Diseases & Immunology has the following opportunity which offers drug development challenges focusing on major viral diseases:

Position will be filled at the Senior Clinical Research Scientist I or Senior Clinical Research Scientist II level. The level of responsibility to be assigned will depend on the individual applicant's educational background and experience level.

**Senior Clinical Research Scientist I:** Must have a Master's degree in a biological, physical, health, or other related science or a Doctor of Pharmacy degree PLUS 8 years of clinical/research experience (e.g. employment in a patient care setting, such as nursing or pharmacy; clinical laboratory experience; experience as a clinical research monitor/coordinator); OR a Ph.D in one of the disciplines described above, PLUS 5 years of clinical/research experience (as described above).

**Senior Clinical Research Scientist II:** Must have a Master's degree in one of the disciplines described above OR Doctor of Pharmacy PLUS 10 years of clinical/research experience as described above OR a Ph.D in one of the disciplines described above PLUS 7 years of clinical/research experience as described above.

Other factors to be considered in selection include advanced training or experience in infectious diseases or microbiology, clinical drug development experience with major project responsibilities, experience with clinical research methodology/activities (e.g. study design, site monitoring) computer experience, and technical writing abilities.

In addition to the advantages of our stimulating and challenging atmosphere, Burroughs Wellcome Co. offers one of the best compensation and benefits packages in the industry, including comprehensive health and dental plans, life and disability coverage, tuition reimbursement, relocation benefits, pension and investment savings plan, fitness facilities and more. To apply, please send your resume or C.V. indicating POS. #65427-19 in your cover letter by **April 18, 1994** to: **Burroughs Wellcome Co., HR-RD&M, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

For information on other job opportunities with Burroughs Wellcome Co., call our job information line at 919-315-8347.



**Wellcome**

**BURROUGHS WELLCOME CO.**

An Equal Opportunity Employer.

# Current Frontiers in Virology

## **The Second Annual Bristol-Myers Squibb Symposium on Infectious Diseases**

**May 20-21, 1994**

**The Drake Hotel, Chicago, Illinois**

*Organized by:*

*Bernard Roizman, Sc.D., The University of Chicago  
and Patricia Spear, Ph.D., Northwestern University*

### **Friday Morning, May 20**

#### **Regulation of Gene Expression**

Arnold J. Berk, University of California, Los Angeles

Rozanne M. Sandri-Goldin, University of  
California, Irvine

Bryan Cullen, Duke University

**Special Lecture: PrP and the Scrapie Agent –**  
Bruce Chesebro, NIAID, Hamilton, Montana

### **Friday Afternoon, May 20**

#### **Advances in Studies on Viral Replication**

Peter Palese, Mount Sinai School of Medicine

Don Ganem, University of California, San Francisco

John Taylor, Fox Chase Cancer Center

Michael Lai, University of Southern California

**Special Lecture: Immune Recognition of Viral  
Antigens – Ian Wilson, Scripps Institute**

### **Saturday Morning, May 21**

#### **Attenuation of the Immune Response by Viral Gene Products**

Linda Gooding, Emory University

David Pickup, Duke University

Elliott Kieff, Harvard Medical School

Philip M. Murphy, NIAID, Bethesda, Maryland

### **Registration and Information**

*\$50 before April 15; \$85 after April 15. No fee for  
graduate students, residents or fellows before April  
15. After April 15, the fee is \$25. Please provide a  
letter verifying your status. For more information  
and a registration form, please call the University of  
Chicago, Center for Continuing Medical Education  
at (312) 702-1056 or FAX at (312) 702-1736.*

## **President Boyce Thompson Institute at Cornell University**

Applications and nominations are invited for the position of President of Boyce Thompson Institute for Plant Research at Cornell University. Boyce Thompson Institute (BTI) is a non-profit, independent, privately endowed corporation conducting research on plants and associated organisms. The Institute is a modern facility located on the campus of Cornell University and is affiliated with the College of Agriculture and Life Sciences. BTI has an annual budget of \$8 to \$9 million and employs approximately 145 scientists and support staff, 70 at the Ph.D. level.

The President serves as chief executive officer and is responsible for formulation of Institute policy, evaluation of productivity of research programs, selection of scientific personnel, acquisition of financial support, overall operation of the Institute, interaction with Cornell University administration, and development and promotion of external relations. The President reports to the BTI Board of Directors.

Selection will be based upon experience, consistent with the goals of the Institute which span basic and applied research. Demonstrated scientific leadership, proven administrative ability, and success in recruiting research support and/or fund-raising are essential. Applicants should send curriculum vitae, bibliography and names of five professional people acquainted with the applicants background to: Norman R. Scott, Vice President for Research and Advanced Studies, Chair of Search Committee, Cornell University, 314 Day Hall, Ithaca, NY 14853. Nominations should also be sent to Dr. Scott. All applications and nominations should be submitted as soon as possible. The Search Committee will begin reviewing applications June 1, 1994. Target starting date by July 1, 1995 to September 1, 1995. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

U. S. DEPARTMENT OF ENERGY

## **P**OSTGRADUATE RESEARCH PROGRAMS

Human Genome	Global Change
Toxicology	Engineering
Fossil Energy	Physical Sciences
Hazardous Wastes	Environmental Sciences
Fusion Energy	Life Sciences
Computer Sciences	Risk Analysis

- Research at national laboratories
- Stipends \$22,200 - \$55,000 depending on degree, program, research area
- Recent graduate degree
- U.S. citizenship or PRA status may be required

Information and applications:

**Postgraduate Research Programs**  
Science/Engineering Education Division  
Oak Ridge Institute for Science and Education  
P.O. Box 117  
Oak Ridge, TN 37831-0117  
(615) 576-7385



## ANNOUNCEMENT

# Educational Loan Repayment

❖ The biomedical research community is familiar with the number of grants and contracts awarded by the National Institutes of Health (NIH) to researchers throughout the country. However, in fiscal year 1994, approximately 15% of our \$1.3 billion HIV/AIDS budget will be devoted to research activities conducted intramurally at NIH's 306 acre campus in Bethesda, Maryland.

❖ Located close to the center of Washington, D.C., the NIH employs more than 4,000 doctoral level scientists (Ph.D.'s, M.D.'s, D.D.S.'s, D.M.D.'s, D.V.M.'s, and D.O.'s). NIH's 500-bed Clinical Center is home to more than half the research beds in the country.

❖ The NIH offers a loan repayment program (LRP) for researchers and physicians—who agree to join our HIV/AIDS research team for a minimum of two years. Depending on your total debt, we can repay up to \$20,000 per year of your educational debt and provide partial reimbursement for Federal (39% of loans repaid), State and local tax liabilities. All LRP benefits are in addition to attractive Federal salaries and associated benefits.

❖ The NIH provides exceptional training opportunities in basic, behavioral and clinical research. The following are some examples of the HIV/AIDS research projects in which our LRP

participants are engaged: *a molecular analysis of the viral burden in blood and lymphoid tissue of HIV-infected individuals on antiretroviral agents; the design and synthesis of synthetic peptide polymers for the production of anti-HIV vaccines; and the development of a prokaryotic expression system for the Tax protein and the establishment of Tax affinity columns.*

❖ More than 70 researchers and physicians have benefitted from the NIH's LRP for AIDS Research since its inception in FY 1990. Our ability to make accelerated repayments has enabled us to significantly reduce the educational debt burden of our participants and prevented the accrual of large amounts of interest, allowing them to pursue biomedical research careers.

❖ Telephone the LRP InfoLine, 24-hours a day toll-free, at 800-528-7689, to obtain our recently updated *Applicant Information Bulletin* and our *User's Guide to the NIH EDNET*, an electronic bulletin board listing NIH's postdoctoral training opportunities.



National Institutes of Health  
Public Health Service  
U.S. Department of Health and Human Services

This program is administered without regard to race, color, national origin, handicap, age, sex, or religion.

The Agricultural Experiment Station at the University of Minnesota invites applications for an Assistant Professor specializing in small grains research and outreach. This is a 12-month, non-tenure track faculty appointment with a three-year funding commitment at the Northwest Experiment Station, Crookston, MN. The successful candidate will develop a comprehensive research and outreach program which is responsive to the small grain production and management needs of the region. Collaboration with other researchers, industry personnel and commodity organizations to identify, design, conduct and evaluate research and education strategies that will enhance small grain productivity, profitability and/or sustainability is expected. *Minimum qualifications:* A Ph.D. in a plant science discipline. *Minimum experience:* Research or extension experience in production agriculture. Effective oral and written communication skills and an ability to effectively cooperate with co-workers. *Desired academic preparation:* Courses in agronomy, crop physiology, entomology, plant pathology, statistics, soil science, and weed science. *Desired experience:* Demonstrated disciplinary and interdisciplinary collaborative research experience; involvement with small grains agronomic, soils, pathological, or entomological research and/or extension programs. Demonstrated ability to provide leadership to research and outreach programs. Salary is commensurate with qualifications and experience. The position is available July 1, 1994. Applications should include a C.V., all transcripts, 1-2 page statement of interests related to this position, and names and addresses of three references to:

Dr. Robert Busch  
University of Minnesota  
Department of Agronomy and Plant Genetics  
411 Borlaug Hall  
St. Paul, MN 55108

All materials must be postmarked no later than May 15, 1994. The University is an equal opportunity educator and employer.

## SCIENTIST Drug Metabolism

Wyeth-Ayerst Research, a major division of American Home Products Corporation and a leading pharmaceutical company, has an immediate opening for a Scientist with training in drug metabolism at our pharmaceutical research facility in Princeton, New Jersey.

Responsibilities will include proposing, planning and conducting drug disposition studies (absorption, distribution, metabolism and excretion) of drug candidates, performing metabolite isolation and identification, evaluating data and writing reports.

Requirements include a doctorate degree in drug metabolism, medicinal chemistry, chemistry, analytical chemistry or a closely related discipline with 0 to 3 years experience in pharmacokinetics, and isolation and identification of metabolites. Knowledge or experience in the field of estrogens or other steroid hormones is preferred. Individual will be expected to have excellent understanding of drug metabolism concepts and principles along with expertise in chemistry, chemical analysis, metabolite isolation and identification, and radiotracer work. Must have demonstrated the ability to independently design, conduct and successfully complete drug metabolism studies.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements to: **Wyeth-Ayerst Research, Human Resources, Position #636, CN 8000, Princeton, NJ 08543-8000.** Equal Opportunity Employer, M/F/D/V.



Leading The Way for a Healthier World

## MANAGER: TECHNOLOGY ASSESSMENT PROGRAM

The newly formed Management Decision and Research Center (MDRC) within the Health Services Research and Development Service (HSR&D) of Veterans Health Administration (VHA) is recruiting a manager for its Technology Assessment program. This program supports VHA senior management and researchers in making informed decisions about the acquisition and use of new medical technologies.

The position is national in scope and provides exceptional opportunities for both research and consultation. As part of the MDRC management team, the individual will have a major role in the MDRC's development and in health care issues of national importance.

An outstanding background in technology assessment is required. Candidates should have either an MD or a PhD in Economics or another health related research discipline. The position is located in Boston.

For more information, please contact:

**Martin P. Charns, D.B.A., Director, MDRC,**  
Department of Veterans Affairs  
Medical Center (152-M),  
150 S. Huntington Avenue, Boston,  
MA 02130: (617) 278-4433.



An equal opportunity employer.

## MANAGER Test Development & Screening Ph.D. Biochemistry or Molecular Biology

FMC, a Fortune 150 leader in chemical research and development, is actively recruiting an individual who has a Ph.D. in Biochemistry or Molecular Biology. A strong background in target site assay development and supervisory experience are necessary.

Reporting to the Director of Discovery Research, the selected candidate will be responsible for:

- Directing a research team in the identification and characterization of target receptors
- Developing biochemical target site assays for screening
- Executing high throughput screening in support of lead discovery and chemical optimization

FMC offers a competitive salary with excellent benefits. Please send resume with salary history/requirements to **Employment Coordinator, FMC Corporation, Dept. 94-24, P.O. Box 8, Princeton, NJ 08543.** Equal Opportunity Employer, M/F.



### UCLA School of Medicine Tenure-Track Assistant Professor Biomathematics, Computational/ Communication Sciences

The Crump Institute of Biological Imaging of UCLA School of Medicine invites applications for a full-time, tenure-track assistant professor position with a primary research focus in Biomathematics and Computational/Communication Sciences. The Crump Institute is a Science and Technology Center with a mission of merging the principles and technologies of imaging, mathematics, modern biology and biochemistry to allow novel and innovative biological imaging techniques to be developed to study basic molecular, biochemical, and kinetic mechanisms associated with normal and abnormal organ/tissue function. We are interested in an outstanding individual who is capable of establishing a scholarly research program and can interact effectively with other investigators in the highly multi-disciplinary environment of the Institute. Preferred areas of interest include 3-dimensional image reconstruction, tracer kinetic modeling in PET, and application of animation, expert systems, and computer-based multi-media technology for learning/educational system development.

Applicants should have a Ph.D. and/or M.D. with demonstrated research experience. The successful candidate will also participate in the education of graduate and medical students.

Please submit before May 1, 1994 your curriculum vitae, representative reprints, three letters of reference and a one page statement of research and career goals to:

**(Henry) Sung-Cheng Huang, D.Sc.**  
Search Committee Chair  
UCLA School of Medicine  
Department of Molecular and  
Medical Pharmacology  
10833 Le Conte Ave.  
Los Angeles, CA 90024-1735

UCLA is an affirmative action/equal opportunity employer

### Hall Family Foundation Distinguished Professorship in Molecular Medicine

The University of Kansas Medical Center seeks to recruit a distinguished physician/scientist with national and international reputation and achievements in molecular medicine. The professorship is established in partnership with the Hall Family Foundation which will endow the salary and expenses of the successful candidate. We seek an internationally recognized physician/scientist with a clear history of productive, innovative, and progressive clinical and research achievement in the field of molecular medicine. The successful candidate will establish a basic science and clinical program in molecular medicine at the University of Kansas School of Medicine. The individual will be allocated research space in a new research building slated for completion in Summer, 1994. The incumbent will have interactions with 350 full-time faculty members at the University of Kansas School of Medicine who have extensive research centers in cancer, aging, neurosciences, environmental health, mental retardation and reproductive biology. The environment will provide the candidate with rich opportunities for clinical applications of molecular medicine and continuation of basic research in molecular biology. This appointment will be at the full professor level with tenure in either a clinical or basic science department. Applications from interested individuals or nominations of suitable individuals are invited. Please contact: **Daniel Hollander, M.D., Executive Dean, School of Medicine, University of Kansas Medical Center, Kansas City, KS 66160-7300.** The University of Kansas is an Equal Opportunity/Affirmative Action employer.

Howard Hughes Medical Institute

## X-RAY SPECIALIST

The Howard Hughes Medical Institute conducts scientific research in laboratories affiliated with leading academic medical centers throughout the United States. We are seeking a Research X-Ray Specialist to work with an Investigator and the research staff at our Columbia Presbyterian Medical Center facility.

The successful candidate will design instrumentation for specific experimental needs as well as oversee the X-ray facility and maintain its equipment, which consists of two Rigaku rotating anode X-ray generators, a multiwire area detector, precession cameras, and crystal freezing devices.

To qualify you must have a Bachelors (advanced degree preferred) in an appropriate technological field and at least two years of related experience. Mechanical and electronics experience is required. Specific experience with scientific instrumentation or X-ray generators, as well as with computer hardware and software is preferred.

HHMI offers a competitive salary and superior benefits. Send resume and cover letter by **April 10, 1994**, including the names and telephone numbers of at least two professional references, to: **Dr. Wayne Hendrickson, Dept. of Biochemistry and Molecular Biophysics, 630 West 168th Street, New York, N.Y. 10032.** EOE.



**MOLECULAR ONCOLOGY**  
**BOYER CENTER FOR MOLECULAR MEDICINE**  
**YALE UNIVERSITY SCHOOL OF MEDICINE**

The Yale University School of Medicine is seeking applicants at the level of Assistant or Associate Professor for the Molecular Oncology Program in the Boyer Center for Molecular Medicine. Individuals with research interests in the molecular aspects of oncology including mechanisms of growth control, oncogene and suppressor gene functions, and cell cycle regulation are invited to apply. M.D. or Ph.D. appointees will hold regular faculty positions in one of the existing departments of the School of Medicine. Partial research support for the initial years of the appointment will be provided. Curriculum vitae, a summary of research interests, and three letters of reference should be submitted by **May 1, 1994** to:

**Vincent T. Marchesi, M.D., Ph.D.**  
**Search Committee for the**  
**Molecular Oncology Program**  
**Boyer Center for Molecular Medicine**  
**Yale University School of Medicine**  
**295 Congress Avenue, 109 BCMM**  
**P.O. Box 9812**  
**New Haven, CT 06536-0812.**

*Yale University is an Equal Opportunity/  
Affirmative Action Employer.*

**ASSISTANT OR**  
**ASSOCIATE PROFESSOR**  
**HUMAN GENETICIST/MOLECULAR**  
**EPIDEMIOLOGIST**  
**University of Cincinnati Medical Center**  
**Cincinnati, Ohio**

A full-time tenure-track faculty position is available immediately. The primary department for this appointment is the Department of Environmental Health in the College of Medicine; joint appointments with other Departments in the College (e.g. Pediatrics, Internal Medicine or Pathology) could be negotiated. Candidate must have an M.D. or Ph.D. degree, at least 3 years' postdoctoral experience in molecular biology and genetics, and an active/funded research program in human genetics and epidemiology. Additional research experience in the interaction between genes or gene products and occupational and/or environmental agents is strongly preferred. Primary criteria for appointment will include a relevant publication record in peer-reviewed journals, demonstrated ability through grant awards for significant population/clinical research, and evidence of successful teaching through student evaluations.

It is intended that the candidate join in the expansion of an existing research program in ecogenetics and collaborate with other investigators having similar interests and objectives, specifically in the design and conduct of clinical and population studies of environmental exposures, in order to identify potentially high-risk subpopulations. Interdepartmental collaborations, through the Center for Environmental Genetics at this broad-based State of Ohio University Medical Center, are very much encouraged.

Interested candidates should forward a curriculum vitae, a list of publications, a summary of research interests and three letters of recommendation to: **Nancy A. McVay, Department of Environmental Health, University of Cincinnati, PO Box 670056, Cincinnati, OH 45267-0056. Applications must be received by May 20, 1994. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.**

Quality Biotech Inc. is a world leader in contract research and biosafety testing for the biopharmaceutical industry. As part of our expansion, we have the following openings in our BioAnalytical Services and Virology Departments.

**DIRECTOR - BIOANALYTICAL SERVICES**

This position is responsible for the development and implementation of new assays using novel and emerging technologies for biochemical analysis of nucleic acids, proteins and carbohydrates under strict compliance with GLP/cGMP guidelines. The Director will also manage our PCR lab operations which includes duties such as conducting routine assays, cloning and sequencing, isolation and characterization of DNA, protocol development and serving as Study Director. Other responsibilities include management of technical staff, data interpretation/analysis, preparation and presentation of scientific manuscripts, support of our technical sales effort, and interaction with clients and regulatory authorities. The successful candidate will have a Ph.D. in Biochemistry or a related field plus three to five years relevant experience.

**SENIOR SCIENTIST - VIROLOGY**

We seek an individual experienced in working with a variety of systems for the detection and quantification of viruses, including *in vitro* and *in vivo* infectivity assays, as well as novel molecular and immunological techniques, to join our Virology Department. Knowledge of a wide range of viral systems including murine and human retroviruses, herpes viruses, hepatitis viruses, adenoviruses and adeno-associated viruses, as well as unconventional agents such as scrapie is preferred.

This position requires a Ph.D. in Virology, Microbiology or related field, two to five years relevant experience, a record of independent scientific leadership, supervisory experience, and excellent communication skills. Familiarity with biosafety regulations and GLP/cGMP guidelines is desirable.

Quality Biotech is located in the Greater Philadelphia region - an area rich in scientific, cultural and recreational diversity. We offer excellent opportunities for professional growth, a competitive salary, relocation assistance, health benefits, 401(k) and Flexible Benefit plans. Please send resume and salary requirements to: Quality Biotech Inc., Human Resources - SCI, 1667 Davis Street, Camden, NJ 08104. An Equal Opportunity Employer.



**Quality Biotech®**

***Key challenges with a world leader***

BioWhittaker has achieved world prominence by developing, refining, and marketing superior biomedical research and diagnostic products. Our company has experienced significant growth in recent years, and expects this trend to continue. Accordingly, we are always interested in hiring top technical/scientific people. We are seeking three capable professionals to assume key responsibilities in the following areas:

**SENIOR DIRECTOR, R&D**

This position calls for the expertise and wherewithal to drive our R&D Division. To qualify, you should possess an M.D. and Ph.D. with 15+ years' work experience and proven strength and leadership ability in a similar capacity.

**MOLECULAR BIOLOGIST**

You should be able to utilize your broad theoretical knowledge to lead projects concerned with clones. You will be responsible for bringing products from initial research through development to pilot operations. Qualifications include a Ph.D. in Molecular/Cell Biology augmented by industrial or relevant post-doctoral experience.

**MARKETING MANAGER - Diagnostic Product Group**

This position calls for a B.S. in Biological Sciences (M.B.A. desirable), strong technical and leadership skills, plus 5 years' marketing experience related directly to our industry. Strength in infectious diseases plus autoimmune, allergy, and virology product areas are particularly desirable.

*We offer an environment conducive to professional and personal growth, competitive salaries, and a comprehensive benefits package. For confidential consideration, please forward your resume, indicating position of interest, to: Human Resources Department-M10/S, BioWhittaker, 8830 Biggs Ford Road, Walkersville, Maryland 21793. We are an equal opportunity employer m/f/h/v — offering a smoke free/drug free environment.*

**BIO WHITTAKER, INC.**

## POSITIONS OPEN

### DIRECTOR

DynCorp-PRI (Program Resources, Inc.) has an opening in our Rockville, Maryland, laboratory for a Director of Biomedical Services to lead a professional staff in providing contract laboratory research services to the NIH (NIAID and NCI), universities, and commercial organizations.

Applicants should possess a Ph.D., M.D., or equivalent and have a minimum of ten years of independent research experience with five years of directing a technical laboratory group. A demonstrated record of achieving and maintaining independent funding support is also required. Individuals with an expertise in infectious disease research are especially encouraged to apply.

Send curriculum vitae to: **DynCorp-PRI, 1 Taft Court, Suit 200, Rockville, MD 20850, Attention: Dr. Zakour.** We are an Equal Opportunity Employer, M/F/D/V.

### ELECTROPHYSIOLOGIST

Applications are invited for a tenure-track **FACULTY POSITION** in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center. The department is expanding its Division of Neurobiology and Behavior Research. Candidates should have a Ph.D. and/or M.D. degree and expertise in *in vivo* and/or *in vitro* neuronal electrophysiology. An interest in CNS-active drugs (psychotherapeutics and drugs of abuse) is highly desirable. The successful candidate will be expected to establish an active, externally funded research program, collaborate with colleagues, and participate in departmental teaching. Adequate space and start-up funds are available. Salary will be commensurate with experience. Applicants should submit curriculum vitae and a statement of research interests and names of three references to: **Dr. Angelos Halaris, Chairman, Department of Psychiatry and Human Behavior, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.** Equal Opportunity Employer, M/F/D/V.

### CURATORIAL POSITION IN MAMMALOGY

Carnegie Museum of Natural History seeks an **ASSISTANT CURATOR (entry level)** for the Section of Mammals. Candidates are expected to: have a recent Ph.D. degree; maintain a strong research program in collection and field-based studies; assist in collection curation, development, conservation and database management; and participate in the Museum's public programs in exhibits and education. **Submit by 15 April 1994:** curriculum vitae, three letters of reference, three recent publications and a letter describing research and curatorial experience, plans and goals to: **Dr. Leonard Krishalka, Chair, Mammalogy Search Committee, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213.** Equal Opportunity Employer, m/f/d/v.

### ANATOMY FACULTY POSITIONS CASE WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

The Department of Anatomy has several full-time, tenure-track openings at the level of **ASSISTANT, ASSOCIATE or FULL PROFESSOR**, with an effective date of July 1, 1994. Two of these positions are to join an established research program in the structural and functional correlates of hypoxia and ischemia. An additional position at the level of Assistant Professor is open for applicants with research experience in craniofacial anatomy for a joint program with the School of Dentistry. Successful candidates must have demonstrated independent research funding by national agencies. Candidates are expected to contribute to graduate and medical teaching in the areas of Gross Anatomy, Histology or Embryology.

Send credentials to: **Dr. Joseph C. LaManna, Department of Anatomy, C.W.R.U., 10900 Euclid Avenue, Cleveland, OH 44106-4930.** An Equal Opportunity/Affirmative Action Employer.

### VICE PRESIDENT OF CHEMISTRY

Will direct scientific programs to develop new anti-infective therapeutic drugs as well as manage a team of chemists that will characterize, synthesize, and provide structure-function relationships in order to develop new compounds. Must have a Ph.D., minimum of 6 years of industry experience, strong publication and patent record, and managerial experience. Send résumé: **A. Lurier, One Kendall Square, Suite 2200, Cambridge, MA 02139** or call (617) 621-7117 for more information.

## POSITIONS OPEN

**EDITOR-IN-CHIEF, WORLD RESOURCES REPORT.** The World Resources Institute (WRI), an independent research and policy institute, seeks applicants for Editor-in-Chief for its **World Resources** report. Candidates should have a minimum of 10 years of relevant experience in research, publishing, or journalism, familiarity with global environment, development and resource issues, and demonstrated ability to write and communicate effectively. Send curriculum vitae to: **Resource and Environmental Information Program, World Resources Institute, 1709 New York Avenue, NW, Washington, DC 20006.** Equal Opportunity Employer. Women and minorities encouraged to apply.

### BIOLOGY DEPARTMENT FACULTY MICROBIAL ECOLOGIST

Tenure-track position available beginning August 1994. Faculty rank negotiable. Responsibilities may include teaching courses in Medical Microbiology, Immunology, Microbiology, Medical Mycology and other courses for non-majors and establishing an independent research program that will involve undergraduates. Ph.D. in microbiology and teaching experience required. Candidates must provide evidence of teaching and research effectiveness. *Minorities and women are especially encouraged to apply.* Send letter of application, curriculum vitae, transcripts, a letter of long-term goals and three (3) letters of reference to: **Dr. William R. Sigmund, Search Chairperson, Biology Department, Slippery Rock University, Slippery Rock, PA 16057.** The deadline for receipt of application is April 18, 1994.

**SLIPPERY ROCK UNIVERSITY IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER.**

### SENIOR FACULTY POSITION

**Department of Biochemistry  
University of Illinois College of Medicine  
at Chicago**

Applications and nominations are invited for a senior-level tenured faculty position of **ASSOCIATE or FULL PROFESSOR**. We are seeking applicants who have a strong record of research accomplishments, a nationally/internationally recognized, funded research program and a commitment to teaching. All areas of biochemistry will be considered. We are particularly interested in scientists using transgenic mouse technology to investigate problems related to gene regulation in the context of molecular biology and medicine, development, signal transduction and molecular immunology. The Department is one of six basic science departments in the largest College of Medicine in the United States, and consists of 19 full-time faculty and 13 joint appointees. The department, college and campus are well equipped and have research facilities that will support any area of contemporary bio-medical research. In recent years we have recruited several senior and junior faculty and are most interested in fostering independent research in an environment of interactive collegiality. Applications should include curriculum vitae, a summary of current and future research plans and the names, addresses, telephone/FAX numbers of at least three individuals for references. All inquiries will be held in confidence. Review of applications will begin after November 1, 1993. Send applications or nominations to: **Chair, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612.** The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

**CHAIR**—Department of Pathology, Microbiology and Immunology, University of California, Davis. **Associate Professor/Professor**—salary commensurate with qualifications. Responsible for maintaining and developing academic programs including undergraduate, D.V.M., graduate academic and graduate clinical curricula, and research. Will participate in teaching, research and service programs of the department. D.V.M./Ph.D. or equivalent required. Board certification in appropriate specialty College of the AVMA preferred. Demonstrated or potential leadership in academic program administration essential. Excellence in research, graduate clinical education and/or graduate academic education, and experience in hospital-based service program and acquisition of extramural funding. Apply to: **Dallas M. Hyde, Recruitment Committee Chair, c/o Jean Kevern, Veterinary Medicine Dean's Office, University of California, Davis, CA 95616.** Applications accepted through April 1, 1994, or until filled. Submit letter of intent, curriculum vitae, 3 to 5 reprints, list of extramural funding, and names and addresses of three references. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) HUMAN GENETICS PROGRAM

The UCLA School of Medicine is planning to establish a Department of Human Genetics. A **PROGRAM DIRECTOR** is now being recruited. The Director will be responsible for creating a genetics program that will become a department, bringing together basic and clinical geneticists at UCLA, and recruiting at least six new tenure-track faculty.

In addition to building a program of basic research and clinical activities focused primarily on human genetics and gene therapy, the Director will be responsible for coordinating human genetics teaching both at the graduate level and in the Medical School curriculum.

Interested applicants must have an M.D. and/or Ph.D., a record of research excellence, broad scientific views and leadership abilities, and should qualify for a professorial appointment at a senior level. Send current curriculum vitae to: **Aldons J. Lusis, Ph.D., Chair, Genetics Search Committee, c/o Dean's Office, School of Medicine, 12-138 CHS, Los Angeles, CA 90024-1722.** UCLA is an Affirmative Action/Equal Opportunity Employer.

### VISITING FACULTY POSITIONS

**THE EVERGREEN STATE COLLEGE** seeks applicants for four full-time positions: two environmental scientists and one social scientist for advanced evening/weekend program, and one environmental scientist for introductory day program. Programs are year-long, interdisciplinary and team-taught. Seek candidates excited about team teaching in interdisciplinary setting and who will bring complementary set of skills in environmental policy and environmental sciences. Candidates for the environmental sciences positions must be trained to teach some combination of natural history (especially botany), geology, ecology, statistics, computer modeling, toxicology, marine studies, physics or chemistry, and must have a demonstrated commitment to environmental politics. Candidates for the social sciences position must be trained to teach some combination of environmental history, environmental policy and politics, geography, environmental education, statistics, and community studies. For application procedures call: **Faculty Hiring Coordinator, (206) 866-6000 extension 6861, or FAX: (206) 866-6794.**

**BIOLOGY:** Baldwin-Wallace College invites applications for a full-time **TENURE-TRACK POSITION** beginning September 1, 1994, to teach courses in immunology, biochemistry, microbiology, and general biology. All courses are at the undergraduate level. Candidates must have a Ph.D. Excellence in teaching is required and research activity that involves undergraduates is encouraged. Salary is dependent on qualifications. Baldwin-Wallace is a liberal arts-oriented college offering courses in the day, evening, and weekend at both the undergraduate level and Master's level in business and education. Located in a suburb of Cleveland, the College has a total enrollment of 4800 with a full-time day enrollment of 2600. Please send statement of teaching and research interests, curriculum vitae, official transcripts, and three letters of recommendation to: **Dr. Stephen D. Hilliard, Chairperson, Biology Department, Baldwin-Wallace College, 275 Eastland Road, Berea, OH 44017-2088.** Deadline for receipt of applications is March 30, 1994. *Minority and women candidates are especially urged to apply.* Baldwin-Wallace is an Equal Employment Opportunity/Affirmative Action Employer.

**FACULTY POSITION IN RETINA RESEARCH:** The Department of Ophthalmology at the University of Alabama at Birmingham (UAB) School of Medicine invites applications for a faculty position at the **ASSISTANT PROFESSOR** level. We seek an individual using contemporary molecular techniques to study **CELL BIOLOGY OF THE RETINA**. The successful candidate will establish a productive, independent research program and obtain competitive extramural funding. Laboratory space, start-up funds for laboratory, departmental shared equipment, and the facilities of UAB's interdepartmental Vision Science Research Center are available. Interested and qualified individuals should submit curriculum vitae, a statement of research interests, and have three letters of reference sent by April 25, 1994, to: **Dr. Harold W. Skalka, Chairman, Department of Ophthalmology, School of Medicine/Eye Foundation Hospital, University of Alabama at Birmingham, Birmingham, AL 35294-0009.** UAB is an Affirmative Action/Equal Opportunity Employer.



## Biological Leadership

### *New Directions in Biotechnology*

In your search for an exciting career opportunity, consider joining our well-funded state-of-the-art biotechnology site. We are committed to the development and production of a new generation of healthcare products through biotechnology.

Positions are available in departments engaged in media preparation, cell culture, fermentation, protein purification, bulk formulation, sterile filtration and analytical development. Some positions involve the start-up of new facilities and the development of new production processes.

Depending on the specific position, job requirements include: B.S., M.S., Ph.D., or equivalent experience in applicable discipline, with specific experience in industrial mammalian cell culture, purification, or media production. Additional positions available in Validation, Biochemical Research & Development, and Cellular and Molecular Biology Research.

Excellent salary and benefits package. Interested candidates are invited to submit resumes to:

**Miles Inc.**  
Human Resources  
P.O. Box 1986  
Berkeley, CA 94701  
EOE/AA/D



PHARMACEUTICAL DIVISION

## CARDIOVASCULAR PHARMACOLOGIST

SmithKline Beecham Pharmaceuticals has an international reputation for taking an innovative approach to drug discovery and development. Our success is built on the collaboration of multidisciplinary teams of scientists who share ideas and expertise while working in top-flight facilities on projects that are challenging and diverse.

Currently, we are seeking an Associate Scientist in Cardiovascular Pharmacology to assist in applying cellular biochemical and molecular biology approaches to the identification of novel factors that regulate vascular smooth muscle and endothelial cell growth.

This position requires a B.S./B.A./M.S./M.A. in Biomedical Science, 1-3 years' relevant cardiovascular biology experience and a background in cell culture, molecular biology and computers. A working knowledge of vascular pharmacology with emphasis on endothelial and smooth muscle cell biology further qualifies you.

Based in our modern, state-of-the-art research facility in suburban Philadelphia, near Valley Forge, PA, SmithKline Beecham offers a competitive compensation and benefits package. For confidential consideration, please submit your resume and the names of three references to: SmithKline Beecham Pharmaceuticals, Employment Administrator, #94-0050, PO Box 679, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.

### FACULTY POSITION IN RADIATION BIOLOGY

University of Florida College of Medicine

The Department of Radiation Oncology in conjunction with the University of Florida Cancer Center is seeking highly qualified applicants for a tenure track position at the level of Assistant/Associate or Full Professor. Preference will be given to investigators specializing in radiation biology with experience in apoptosis or molecular repair mechanisms as well as a strong interest in developing interdisciplinary research projects. The successful candidate will assist in teaching a course in Radiation Biology and also supervise graduate research projects. As a member of the Radiation Oncology Department, the individual will attend clinical conferences and endeavor to link relevant research to new cancer therapies. The appointee will have excellent laboratory facilities, access to molecular biology core facilities, a competitive salary and an attractive start-up package.

Candidates should have a Ph.D. or M.D./Ph.D. degree, at least three years of post-doctoral training and a record of accomplishments indicating potential for developing a strong, independent research program. The anticipated start date is 10/1/94. Applicants should provide a brief statement of research interests and plans, curriculum vitae, bibliography and three letters of recommendation by May 1, 1994 to:

**Gali Zavelson, Administrator**  
Health Science Center  
PO Box 100277  
Gainesville, FL 32610-0277

*The University of Florida is an Equal Opportunity/Affirmative Action Employer and specifically encourages applications from qualified women and minorities.*

### RESEARCH MARINE SCIENTISTS

**The Gulf Coast Research Laboratory (GCRL) invites applicants for:**

**Marine Fisheries Scientist:** Requires quantitative skills in fisheries science, especially in fisheries oceanography, population dynamics, and ecology. Practical experience with crustacean and multi-species demersal fisheries desired. Involves management responsibilities over existing programs, including early life history and recruitment of fishes and crustaceans, assessment and monitoring of coastal resources, physiological ecology, resource development. Basic and applied research activities.

**Marine Environmental Scientist:** Background in marine botany with experience in biochemistry, ecotoxicology, physiology, biodiversity, or community and landscape ecology desired. Individual will develop independent research program emphasizing marine/saltmarsh algae or vascular plants.

**GCRL** is a multidisciplinary marine research institution administered by the University of Southern Mississippi. These are twelve-month, state-funded positions. Applicants are expected to collaborate with a multidisciplinary group of marine scientists in such fields as aquaculture, ecotoxicology and pathology, environmental chemistry, fisheries, parasitology, and marine biodiversity. Applicants shall have a Ph.D. and a proven funding record, demonstrated publications record, and superior leadership skills. Academic responsibilities include course development and teaching in respective disciplines and guidance of graduate students. Salary commensurate with experience. Please send curriculum vitae, statement of research interest, selected representative reprints, and names of four references to: **Mrs. Annie Lee Catchot, Gulf Coast Research Laboratory, P.O. Box 7000, Ocean Springs, MS 39566-7000. (601-872-4269)** Application review will begin April 1, 1994. GCRL is an AA/EOC employer.

### DEAN SCHOOL OF MEDICINE

The University of North Dakota invites applications and nominations for the position of Dean of the School of Medicine. The dean is the chief executive and academic officer to the medical school and reports directly to the president of the university.

The School of Medicine is a state-wide, community based medical school with four campuses (Bismarck, Fargo, Grand Forks and Minot) and numerous preceptorship sites throughout the state. Affiliation agreements with private and public hospitals and the appointment of community physicians to the faculty form the basis for an emphasis on the production of primary care physicians for the region. Graduates are well prepared to enter all medical specialties. Each campus has a separate residency program in family medicine and the school has residency programs in surgery, medicine, psychiatry and a transitional program.

A basic science faculty with a strong tradition and commitment to medical and graduate education and to biomedical research is housed in Grand Forks, the administrative headquarters of the school.

The qualifications for the position include the M.D. degree with board certification and a dedication to the concepts and practices of primary care. It will be essential for the successful candidate to be committed to the tenets of the community-based medical school.

Those interested in applying for the position should send their complete cv to: **Dr. Thomas E. Norris, Chair of the Search Committee for Dean, School of Medicine, University of North Dakota, P.O. Box 9037, Grand Forks, North Dakota 58202-9037.** Nominations consisting of name, telephone number and address should be sent to Dr. Norris. Review of applications will begin as soon as they are received. Applications should be received prior to May 1, 1994.

*(The University of North Dakota is an Equal Opportunity/Affirmative Action institution.)*

# Women in Science 1994: *Comparisons Across Cultures*

# Science

WISAD3/11/94



## GRANTS FOR INTERNATIONAL JOINT RESEARCH IN THE AREAS OF MATERIALS AND GLOBAL ENVIRONMENT

The New Energy and Industrial Technology Development Organization (NEDO), a Japanese governmental implementing agency supervised by the Ministry of International Trade and Industry (MITI) of Japan, has been carrying out an International Joint Research Program since 1988. This program aims to contribute to the enhancement of the international level of industrial technology as well as to the advancement of international exchange by supporting international joint research teams which conduct superior research. In addition to supporting international joint research teams which conduct original and innovative basic research in the materials area, international joint research teams which conduct research in the global environment area will be provided with grants in FY 1994. The program in the global environment area will be conducted jointly with the Research Institute of Innovative Technology for the Earth (RITE).

Research grants will be provided to "International Joint Research Teams" which fulfill the following main requirements:

1. Each team, in principle, must be composed of four or more researchers;
2. Each team must consist of researchers of two or more different nationalities;
3. The research organizations where the team members' major activities take place must be located in two or more countries.
4. Each team must appoint a research coordinator and an accounting coordinator. The accounting coordinator must be responsible for accounting matters and function as the liaison between the team and NEDO. The accounting coordinator's organization and research site must be located in Japan, and he/she must be able to communicate with NEDO in Japanese about all accounting matters. The research coordinator can also hold the post of accounting coordinator.

FY 1994's program is shown below:

Research Area	Field of Research	Amount of Each Grant	Number of Themes to be Adopted	Recipients of Applications
Materials	1) <b>Basic research</b> concerning the investigation and elucidation of materials 2. <b>Basic research</b> concerning the practical use of materials	about 30,000,000 yen in FY 1994	6 themes	NEDO (Note a.)
Global Environment	<b>Practical research</b> concerning the production, generation and use of oil-alternative energy which contributes to the conservation and improvement of the global environment	about 30,000,000 yen in FY 1994	1 theme	RITE (Note b.)

\*International joint research teams which conduct research in the energy area and the global environment area (basic research) will not be provided with grants in FY 1994.

### (Recipients of applications)

#### Note a. Materials area

International Joint Research Division,  
Industrial Technology Department  
New Energy and Industrial Technology Development Organization (NEDO)  
Address: PO Box 1151, 21F, Sunshine 80 Bldg.  
3-1-1 Higashi-Ikebukuro, Toshima-ku,  
Tokyo, 170 Japan  
Phone No.: 81-3-3987-9357  
Telefax No.: 81-3-3981-1536

#### Note b. Global environment area

Research Proposals Reception Section,  
Research Planning Department  
Research Institute of Innovative Technology for the Earth (RITE)  
Address: 9-2 Kizugawadai Kizu-cho Soraku-gun,  
Kyoto, 619-02 Japan  
Phone No.: 81-7747-5-2302  
Telefax No.: 81-7747-5-2314

Please be informed that the amount of each grant and the number of themes to be adopted may be changed, and that this grant program is subject to government budget approval. A research team may submit an application a maximum of two times for a grant on the same subject.

The application period is from March 10, 1994 to June 10, 1994. No applications will be accepted later than June 10th.

**ATTENTION:** If there are some discrepancies in a submitted application, for example, it does not follow the Application Guidebook or the research contents are different from the proposed research area, it will be considered invalid.



The **South Florida Water Management District** has an exceptional opportunity available.

### **Distinguished Scientist Aquatic Ecology/Water Resource Management**

The qualified candidate will supervise and conduct applied research on problems concerning the aquatic resources of South Florida, including the Everglades, Lake Okeechobee, Kissimmee River and estuarine ecosystems. Candidates are sought either in wetlands ecology and management, or in advanced numerical analysis of environmental data, particularly water quality analysis.

An expert in wetlands science and management is needed to guide critical research on factors structuring South Florida wetlands, while an expert in numerical analysis is sought to design and oversee advanced statistical analysis and interpretations of environmental data and to direct the development of 'state of the science' databases and numerical models.

A Ph.D. in an Environmental Science or Engineering with aquatic experience, and at least 15 years experience in wetlands ecology, limnology, water quality analysis, applied statistics, hydrological/ecological modeling or environmental management is required, as well as an extensive publication record.

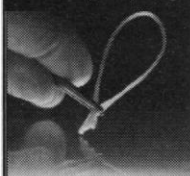
SFWMd offers a highly progressive professional environment with a well-defined team approach to achieve mutual objectives. In addition to competitive compensation, excellent benefits and the opportunity for continuing professional development, our employees enjoy the many benefits of South Florida living with its wonderful sub-tropical climate, exceptional year 'round recreational opportunities and extremely favorable tax advantages.

For additional information, contact Dr. Ken Cummins at (407) 687-2871 or Dr. Laur Tilly at (407) 687-6605 or send your resume and Social Security number to L. Starr, Human Resources, South Florida Water Management District, Ref. #SCILS7120, 3301 Gun Club Road, West Palm Beach, FL 33406.

### **South Florida Water Management District**

The SFWMd is committed to an environment enriched by diversity. We encourage inquiry from all applicants. EOE M/F/D/V

## **B I O M E D I C A L D E V I C E S**



*Collagen Tendon*

## **GOAL: COMMERCIALIZATION**

**COMMERCIAL PROGRESS: At Organogenesis, we're acting**

**on the strength of our proprietary**

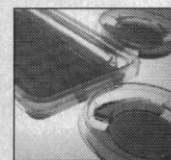
**technology to develop medical devices that will**

**treat defective, traumatized and diseased human**

**tissues and organs, such as skin, arteries, tendons**

**and ligaments. With a commitment to accelerating**

**our research and development, we're adding new talent to our team.**



*Graftskin*

### **STAFF SCIENTISTS**

#### **CELL BIOLOGY**

Candidate will be expected to manage multiple projects in the area of cellular tissue engineering. Areas of research will include cell-cell, cell-tissue and cell-matrix interaction. Suitable candidates will have a minimum of 2-4 years' post-doctoral experience with a background in mammalian cell/developmental biology. Expertise in mammalian cell culture a must. Experience in epithelial differentiation, cytokine research, and/or use of *in situ* hybridization a plus.

#### **CONNECTIVE TISSUE RESEARCH**

Candidate will be expected to play a key role in the further development of unique collagen based medical devices. Areas of research will include collagen fibrillogenesis and extra-cellular matrix assembly. The position requires a PhD with a minimum of 2-4 years' post-doctoral experience and a background in the biochemistry or structural biology of collagen or other extra-cellular matrix components.

*With state-of-the-art facilities, you'll be fully equipped to take on the challenges we offer. You'll also enjoy a competitive salary and benefits package. Reach your scientific goals by sending your resume to: Human Resources Manager, Organogenesis Inc., 150 Dan Road, Canton, MA 02021. An equal opportunity employer.*



**O R G A N O G E N E S I S I N C.**

*Liquor Collagen*

**JOIN OUR FAMILY**

## **POST-DOCTORAL FELLOW**

**Bone/Cell/Molecular Biology**

Saint Francis Hospital & Medical Center is seeking candidates who have completed a doctoral degree to join our NIH-supported Bone Biology Laboratory.

Interested candidates should send a resume and references to:

**Dr. Ernesto Canalis,  
Director,  
Department of Research,  
Saint Francis Hospital  
& Medical Center,  
114 Woodland Street,  
Hartford, CT 06105-1299.**



**SAINT FRANCIS**  
Hospital and Medical Center



**MOUNT SINAI  
HOSPITAL**



**BlueRidge Center**

EEO/AA - M/F/D/V  
Pre-Employment Drug Testing

### **POSITION ANNOUNCEMENT**

#### **Head, Department of Veterinary Biosciences**

The University of Illinois College of Veterinary Medicine at Urbana - Champaign is seeking an outstanding academician to provide direction and leadership for the Department of Veterinary Biosciences which includes the disciplines of morphology, physiology, pharmacology, toxicology and nuclear medicine. Candidates must have a DVM and/or PhD degree and a distinguished record of scholarship to qualify for a tenured, professorial position in the Department. Candidates must also have a sensitivity to student concerns and leadership qualifications. Experience in teaching in a veterinary environment is desirable. Administrative skills and a proven record of success in grantsmanship are required as are strong interpersonal skills and a commitment to excellence in teaching, research, and service. Candidates should have experience and an interest in the recruitment and training of graduate students as well as have expertise in one of the discipline areas represented in the department. A background indicating talent for collaborative and interdisciplinary work is desirable. The Head of the Department of Veterinary Biosciences reports to the Dean and interacts with faculty, staff, professional and graduate students, and College- and University-level administrators.

The appointment is 100% time on a 12-month basis with the Department of Veterinary Biosciences. The position is largely administrative, but the incumbent will be encouraged to teach and conduct research in their area of expertise. Salary and starting dates are negotiable.

Applicants should submit their professional resumes and the names and addresses of three referees to: Dr. J.E. Hixon; Chairperson, Search Advisory Committee; Office of the Dean; College of Veterinary Medicine; University of Illinois; 2001 South Lincoln Avenue; Urbana, IL 61801; 217/333-2760.

In order to ensure full consideration, applications must be received by May 15, 1994.

**THE UNIVERSITY OF ILLINOIS IS AN  
AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER**



## INSTRUCTIONAL DEAN

Science, Mathematics and Applied Technologies

**Montgomery College**, a multi-campus community college, committed to excellence in teaching and to student success, is seeking applications and nominations for the position of Instructional Dean for the **Germantown Campus**. Located in the most populous, racially diverse, and fastest growing county in the state of Maryland, the College is challenged to provide instructional and co-curricular programs to meet the diverse and changing educational, social, economic, and cultural needs of its community.

The Germantown Campus has an enrollment of approximately 4,000 students (Black = 10%, Asian = 7.1%, Hispanic = 3.8%, Native American = 0.3%, and White = 78.8%) and a steady increase in the number and diversity of the student population is projected. The average age of Germantown students is 30.7 years and the majority of the students (59%) are female. Most students attend the campus part-time and approximately half of the student body take courses at night only.

The opening of the Campus' \$12.4 million High Technology and Science Center in the fall of 1995 represents a significant response to the education and training needs of the community and a challenge to the new incumbent.

The Instructional Dean reports to the Provost of the Germantown Campus and provides leadership in curriculum development and the administration of instructional programs. Academic departments include: Accounting, Business, and Management; Computer Applications, Computer Science, and Office Technology; Mathematics; Engineering and Physical Sciences; and Chemistry, Biology, and Landscape Technology.

### Qualifications:

A Master's Degree or equivalent in one of the above disciplines is required; a doctorate is preferred. Progressively responsible managerial experience is required. The following are desired qualifications and candidates should be able to demonstrate experience or abilities in these areas:

- Communicating in writing and orally
- Working with industry leaders and advisory groups to advance education in technologies
- Providing leadership and direction for the development and modification of instructional programs including budget preparation
- Understanding the impact of technology in classroom instruction on students and faculty
- Solving problems
- Teaching and supervision of teaching faculty in scientific/technical disciplines
- Developing and promoting opportunities for faculty professional growth and staff development
- Working with a culturally diverse community and student body

Salary range is \$57,054-\$82,160 / year, with a starting salary falling within the first half of the range. Excellent fringe benefits.

The position is available May, 1994. Review begins April 8, 1994. Call 301-279-5374 for an application or write to the address below:

MONTGOMERY COLLEGE  
Office of Human Resources  
900 Hungerford Drive, Suite 130  
Rockville, Maryland 20850

MONTGOMERY COLLEGE IS AN  
EO/AA/TITLE IX EMPLOYER

Call for Papers . . .

## Journal of **Biomedical Science**

**"A new International Journal  
for a rapidly changing World"**

*Journal of Biomedical Science* is a rigorously peer-reviewed journal published by S Karger AG, Switzerland devoted to prompt dissemination of original research on fundamental and molecular aspects of basic medical sciences. Review articles of current interest are also invited. While the journal is international in scope, one primary aim is to address the emerging global impact of Asian science. Thus *Journal of Biomedical Science*, sponsored by the National Science Council, Taiwan, has editorial offices in Asia and in the USA. Submissions and inquiries about Instructions to Authors may be directed to either office.

**Dr. CC Chang, Editor-in-Chief**  
S & T Building, Rm. 1701  
106 Ho-ping E. Road, Sec. 2  
Taipei 106, Taiwan, ROC  
Tel. 886 2 737-7594 Fax 886 2 737-7248

**Dr. KT Jeang, US Editor**  
Lab. of Molecular Microbiology  
NIAID/NIH Bldg. 4, Rm. 306  
Bethesda, MD 20892 USA  
Tel. 301 496-6680 Fax 301 402-0226

**Associate Editors:** SH Chan; DS Chen; KH Hsieh; MT Hsu; JK Lin; JY Lin; CC Wang

**Advisory Board:** B. Berkhout, YC Cheng, SY Cheng, WY Cheung, S Chien, JE Coligan, HR Colten, MH Ellisman, JM Farley, AS Fauci, BN Fields, BJ Fowlkes, DW Gibson, M Goldstein, ML Hammaraskjold, GS Hayward, SH Hinrichs, IK Ho, DPH Hsieh, SM Hsu, J Hurwitz, KA Jones, BR Jordan, S Kaplan, AM Krieg, T Kristie, MMC Lai, YC Lee, W Leonard, V Ling, DT Liu, HH Loh, TW Mak, MA Martin, BW Matthews, KM Moore, HC Pitot, MM Poo, AB Rabson, D Rekosh, GR Reyes, WS Robinson, A Sato, HA Scheraga, EM Shevach, AR Subramanian, RI Swanstrom, N Talal, AE Taylor, PI Terasaki, POP Ts'o, A Tsugita, M Vassalle, JC Wang, SM Weissman, FY Wong-Staal, SLC Woo, JY Wu, KK Wu, IH Zucker

**Submit** your contribution now! Inquiries about subscription, free sample copy, or advertising should be directed to the publisher at S Karger AG, PO Box CH-4009 Basel, Switzerland or S Karger Publishers, 26 Avon Rd, PO Box 529, Farmington, CT 06085 USA

## POSITIONS OPEN

### POSTDOCTORAL POSITION

A postdoctoral position is available to join a research program on the molecular mechanisms of drug-induced differentiation of myeloid leukemic cells and of coordinate transcriptional regulation of selected genes. Background in molecular biology required; experience with basic protein biochemistry, immunoblotting and cell culture desirable. Please send curriculum vitae and names of three references prior to April 5, 1994, to: Dr. Paul Tempst, Molecular Biology Program, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

### POSTDOCTORAL POSITION T CELL IMMUNOBIOLOGY

Position available early fall 1994 to focus on basic and/or applied abstracts of T cell biology and transplantation immunology. Projects include regulation of programmed cell death and T cell costimulatory pathways. Laboratory will be relocating to the Institute for Human Gene Therapy at the University of Pennsylvania in August 1994. Send résumé and names of references to: Laurence A. Turka, M.D., University of Michigan, 1150 West Medical Center Drive, 1560 MSRB II, Ann Arbor, MI 48109-0676.

**POSTDOCTORAL POSITIONS.** (1) Structure/function relationships in sarcosine oxidase, a multisubunit enzyme using two different flavins and tetrahydrofolate as cofactors. The operon has been cloned and overexpressed. Sequencing and crystallization studies are in progress. (2) The mechanism of dimer repair and the organization of the chromophore binding domains in prokaryotic and eukaryotic DNA photolyases. Applicants should have a background in at least two of the following areas: enzymology, molecular biology, photophysics. Please send curriculum vitae and names of three references to: Dr. Marilyn Jorns, Department of Biological Chemistry, Hahnemann University School of Medicine, Broad and Vine, Philadelphia, PA 19102.

A **POSTDOCTORAL POSITION** is available to study G-protein coupled receptors. Current projects are concerned with molecular biology of  $\alpha$ -adrenergic receptors (with Dr. Schwinn) and substance P/opiate receptors (with Dr. Kwatra). Applicant should be a recent Ph.D. with strong background in molecular biology and some training in protein purification. Please submit curriculum vitae to: Drs. D. A. Schwinn/M.M. Kwatra, Departments of Anesthesiology & Pharmacology, Duke University Medical Center, Box 3094, Durham, NC 27710. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL:** General Biochemistry, Intermediary metabolism, Nutritional Aspects, Oxidative stress, Familiarity with general biochemical techniques, Electrophoresis, Chromatography of proteins. Experience with Organ and Tissue culture techniques and radioisotopic studies of carbohydrate metabolism. Telephone: (410) 706-3395. Résumé: Science, Box 48, 1333 H Street, Washington DC 20005. U.S.A.

**POSTDOCTORAL POSITIONS** (2) available immediately to work in the area of anticancer drug resistance. One position with Dr. K. Tew will focus on the regulation and inhibition of glutathione-related enzymes. The other with Dr. C. Smith will involve biochemical and pharmacological studies on P-glycoprotein. Ph.D. in a biomedical science required; experience with cell culture and molecular biology preferred. Send curriculum vitae and names of three references to: Dr. Kenneth Tew, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

## POSITIONS OPEN

### RESEARCH

**SENIOR POSTDOCTORAL POSITION** is available immediately for research in studying the effects of cytokines and growth factors on nitric oxide synthase transcription and expression in intestinal epithelium. Strong background in molecular biology is essential. Salary commensurate with experience. Direct curriculum vitae and three letters of reference to: Andrew Salzman, M.D., ICU Administration, Room 6171, Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati, OH 45229. FAX: (513) 475-3859. An Equal Opportunity Employer.

**POSTDOCTORAL OR SABBATICAL POSITION** available immediately for a **THEORETICAL ECOLOGIST** to develop long-term spatially explicit models of forest dynamics. Research experience with forest succession, object-oriented programming, and GIS helpful. Application deadline is March 31, 1994. Send curriculum vitae, list of references, and publications to: Dr. Robert J. Taylor, California Forestry Association, 1311 I Street, Sacramento, CA 95814.

### MOLECULAR IMMUNOLOGY

A **POSTDOCTORAL POSITION** is available to study the molecular nature of CD8-MHC class I interaction and the physiologic consequences. Approaches include (a) structure/function analysis and (b) preparation of soluble CD8 for affinity measurements (BIAcore technology) and physiologic studies. Please send curriculum vitae and names of 3 references to: Dr. P. Kavathas, Departments of Laboratory Medicine, Immunobiology and Genetics, Yale University School of Medicine, 333 Cedar Street, P.O. Box 208035, New Haven, CT 06520-8035.

**JUNIOR POSTDOCTORAL POSITION** available immediately to study novel marine bioadhesive. Must have research experience in biochemistry of extracellular matrix or related topic. Opportunity for field research in Antarctica. Call: Sam Bowser at (518) 473-3856 for details, or send curriculum vitae and names of references to: Dr. Sam Bowser, Wadsworth Center for Laboratories & Research, P.O. Box 509, Albany, NY 12201. Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** (2 years) available to study the regulation of neurotransmitter glutamate transport under normal and pathophysiological conditions. Training grant conditions limit position to candidates with an M.D. or Ph.D. degree, who are American citizens or in possession of a green card. Experience with various molecular biological techniques, phosphorylation, and cell culturing are preferred. Interested individuals should send letter of interest, along with curriculum vitae and at least 3 references to: Jeffrey D. Rothstein, M.D., Ph.D.; Johns Hopkins University, Department of Neurology; Meyer 5-119, 600 North Wolfe Street, Baltimore, MD 21287. Telephone: 410-955-6435; FAX: 410-955-1961. Johns Hopkins University is an Equal Opportunity Employer.

**POSTDOCTORAL. YEAST mRNA EXPORT.** To analyze and clone available ts mutants of *S. cerevisiae*, known to be blocked in mRNA transport from nucleus to cytoplasm (PNAS, 89, 1312; EMBO J., 12, 2929). Background in molecular genetics essential. Send curriculum vitae, two letters of recommendation and transcripts to: Dr. A.M. Tartakoff, Institute of Pathology, Case Western Reserve University, School of Medicine, 2085 Adelbert Road, Cleveland, OH 44106.

**POSTDOCTORAL POSITION MOLECULAR BIOLOGY OF ERYTHROPOIESIS** is available immediately for NIH-funded identification and isolation of genes active in signalling the maturation, cytokine responses, and/or apoptosis of murine erythroid colony forming units. Applicants should send curriculum vitae and names of three references to: Dr. Samuel Boyer, The Johns Hopkins University School of Medicine, 1125 Ross Building, Baltimore, MD 21205; An Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**MARINE POPULATION GENETICIST.** A **POSTDOCTORAL POSITION** is available for research on population genetics of seagrasses. Applicants must demonstrate experience in molecular methods such as RFLP's or RAPD's. Position is available for 1 year, with strong possibility of renewal for 2 additional years. Send curriculum vitae to: Kimon Bird, Center for Marine Science Research, University of North Carolina at Wilmington, Wilmington, NC 28403. Telephone: 910-256-3721; FAX: 910-256-8856. UNCW is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately to study the molecular mechanism of drought tolerance in higher plants. Strong experience in plant molecular biology and biochemistry is required. Send or FAX curriculum vitae along with the names, addresses and telephone numbers of three references to: Dr. Zohreh Tabaeizadeh, Department of Biology, University of Quebec in Montreal, P.O. Box 8888, Station "A," Montreal, Quebec, Canada, H3C 3P8. (Telephone: 514-987-8563, FAX: 514-987-4647).

**POSTDOCTORAL POSITION** to study transcriptional control of hematopoietic proliferation and differentiation. Focus of laboratory has been erythropoietin signal transduction with emphasis on ion channel regulation. Strong background in molecular biology required. Send curriculum vitae and names of references to: Barbara A. Miller, Division of Pediatric Hematology/Oncology, Box 850, Hershey Medical Center, Hershey, PA 17033. The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

**POSTDOCTORAL POSITION** available summer 1994 for Ph.D./M.D. specializing in neuropharmacology/physiology. Interdisciplinary experience desirable in analysis of brain neurotransmitter activity in relation to alcohol/substance abuse, hunger, other behaviors. Send curriculum vitae and three letters of recommendation to: Dr. R. D. Myers, Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC 27858. Federal law requires proper documentation of identity and employability at the time of employment. Affirmative Action/Equal Employment Opportunity.

### POSTDOCTORAL POSITION SYNTHETIC ORGANIC CHEMISTRY

One postdoctoral position available in cancer research laboratory with emphasis on the design, synthesis, characterization and evaluation of novel antitumor agents. Current studies include development of mechanism-based protease inhibitors and novel tryptophan analogs targeted at carcinoid disease. This position funded by NCI training grant and/or NIH/R01 grant; successful applicant will meet eligibility requirements for support. Applications including curriculum vitae, a summary of research interests/experience, and names of three references should be forwarded to: Matthew M. Ames, Ph.D., Chair, Division of Developmental Oncology Research, Mayo Comprehensive Cancer Center, Mayo Clinic, 200 First Street SW, Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

### POSTDOCTORAL POSITION CARDIOLOGY

Position available in the laboratory of Dr. Janet Robishaw at the Weis Center for Research. This position offers a unique opportunity to combine pharmacological and molecular biological approaches to investigate the function of different  $\alpha_1$ -adrenergic receptor and G protein subtypes in neonatal, rat cardiac myocytes. The successful applicant for this position will have a Ph.D. degree with experience in one or more of the following areas: cell culture, transfection/microinjection of cDNA's into cells, analysis of receptor-G protein coupling and phospholipase C.

The Weis Center for Research is a well-equipped facility located in a semi-rural area. Competitive salary and fringe benefits are available. Send curriculum vitae and names of three references to: Geisinger Human Resources (JDR), 100 North Academy Avenue, Danville, PA 17822-1529. Equal Opportunity Employer, M/F/H/V.

**CHAIRPERSON  
DEPARTMENT OF MICROBIOLOGY  
AND IMMUNOLOGY**

The University of Texas Medical Branch (UTMB) at Galveston invites applications and nominations for the position of Chair of the Department of Microbiology and Immunology. UTMB seeks a distinguished M.D. and/or Ph.D. scientist with an outstanding record of significant scientific productivity, a commitment to excellence in teaching both graduate and medical students, and an ability to attract external funding. The candidate should also have the capability to offer scientific leadership to a department covering the broad disciplines of microbiology and immunology and the commitment to lead the department to national prominence and academic excellence. The department occupies space in a new research building.

The Department currently includes 28 full-time faculty members and 11 postdoctoral fellows. The new Chair will have the opportunity to recruit faculty members. The Department is responsible for teaching 210 UTMB medical students annually and has a graduate program with 34 students enrolled.

Interested applicants should send a detailed curriculum vitae, an outline of current and future research interests, and names of three references to: David H. Walker, M.D., Chair, Microbiology Search Committee, Department of Pathology, The University of Texas Medical Branch, 301 University Blvd., Galveston, TX 77555-0609. UTMB is an equal opportunity, affirmative action employer M/F/D/V. UTMB is a smoke-free/drug-free workplace. UTMB hires only individuals authorized to work in the U.S.

**UMEÅ UNIVERSITY, SWEDEN**

**3 PROFESSORS IN THE  
FACULTY OF MEDICINE:**

**MEDICAL MICROBIOLOGY (ref: 321-134-94)**

**MEDICAL GENETICS (ref: 321-135-94)**

**MEDICAL BIOPHYSICS (ref: 321-136-94)**

Applications are invited from internationally-established scientists to fill three positions at the rank of full professor with tenure in the Depts. of Microbiology, Medical Genetics and Medical Chemistry and Biophysics. Existing research groups, including neighbouring departments (Cell and Molecular Biology, Immunology, Virology, Biochemistry) and a new Center for Molecular Pathogenesis and Structural Biology, provide a stimulating scientific environment in which the successful applicants are expected to develop strong research programmes.

Further information (including application procedure) can be obtained from the Dean of the Faculty of Medicine, Prof. Thomas Olivercrona or from the Registrar of Faculty, Mr. Svante Lampa (Fax +46-90-167660). Postal address: Faculty of Medicine, University of Umeå, S-901 87 Umeå, Sweden.

The closing date for completed applications is April 15, 1994.



**Endowed Chair in Psychiatry**

**The Ohio State University  
College of Medicine  
Department of Psychiatry**

Applications and nominations are invited for The John D. and E. Olive Braubach Endowed Chair at the Full Professor level (with tenure) in the Department of Psychiatry at the Ohio State University College of Medicine. The primary criterion for appointment will be a distinguished record of funded research in an area of psychiatry/neuroscience. Applicants must have the M.D. degree and be board certified in psychiatry. While the primary appointment is in the Department of Psychiatry, eligibility for a joint appointment in one or more of the basic or clinical science departments in the College of Medicine is desirable.

The Department of Psychiatry has several prominent researchers and significant research funding in several areas of basic or clinical research. In addition, the College of Medicine has strengths in a number of areas in neuroscience, and a commitment to enhancing both clinical and basic neuroscience.

The Ohio State University is a major research institution with undergraduate colleges, and the graduate and professional colleges (including medical, dental, veterinary, allied medical, and pharmacy) located on the same campus. Physical facilities are excellent, and the Columbus metropolitan area offers diverse cultural and employment opportunities in its 1.4 million inhabitants.

Applications, including a curriculum vitae and the names of 3-5 references should be sent to:

Henry A. Nasrallah, M.D.  
Professor of Psychiatry  
Department of Psychiatry  
The Ohio State University College of Medicine  
473 West 12th Avenue  
Columbus, Ohio 43210  
Phone: (614) 293-8283  
Fax: (614) 293-4200

Deadline for receipt of applications is May 31, 1994.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.

**ÉCOLE POLYTECHNIQUE  
FÉDÉRALE DE LAUSANNE**

The Swiss Federal Institute of Technology, Lausanne (EPFL, ETH-L) seeks to appoint a

**Professor of Physical Chemistry  
of Polymers and Membranes**

at the associate or full professorial level. The successful candidate is expected to develop a research program at the leading international level in the physical chemistry of synthetic and/or biological polymers and membranes. Candidates should have a strong interest in teaching physical chemistry both at the undergraduate and graduate levels, and are expected to teach in French after some period of adaptation. The appointed professor will be affiliated to the Institute of Physical Chemistry of the Chemistry Department.

Candidates with strong research experience are encouraged to ask the documents pertaining to this position by writing to

**Présidence de l'Ecole polytechnique fédérale de Lausanne, CE-Ecublens, CH-1015 Lausanne, Switzerland, and to apply before March 15, 1994.**

# knock, knock.

**(That's opportunity knocking.  
Hint: Turn to page 1467.)**

Open this issue of SCIENCE to the special section and you'll open the door to a world of new career possibilities. Inside, you'll find information about exciting open positions from pharmaceutical and biotechnology companies as well as leading scientific and medical institutions. The key to a rewarding future is knowing when opportunity knocks. Every week SCIENCE gives you the chance to review intriguing open positions from all around the world in our weekly recruitment advertising section and in our special sections, such as *Women in Science* and *Biotechnology/Pharmaceutical Careers*.

Unlock your career potential by reading SCIENCE.  
Sometimes opportunity knocks just once.

## SCIENCE



# How well do we understand inkjet printing?

## Let's say we practically invented the technology.

Hewlett-Packard's Inkjet Supplies Business Unit is responsible for some of the most dynamic innovations in the computer printer industry. Our products have become market leaders worldwide. Ink technology for these products has played a significant role in our success. The science of this ink technology is both fascinating and complex. We currently have opportunities available in the following area:

### **R&D Chemist - Ink Development**

We are looking for energetic women and men who want a challenging career in a product R&D environment. You will have the opportunity to be creative and apply chemical principles to ink development. Since ink chemistry is at the core of our inkjet printer technology, your development efforts will have a direct and tangible influence on the shaping of future printers.

Candidates should possess solid academic training in the fundamentals of chemistry with a PhD or MS in either physical, organic, inorganic, or other fields of chemistry which could be applied to ink development. Preferred candidates will have: solution chemistry experience, good experimental laboratory techniques, good analytical problem solving skills, as well as excellent interpersonal, oral, and written skills. Although experience with dyes, pigments, surfactants, or rheology is not necessary, experience in any of these areas is a plus.

Complementing your challenging career is the community of Corvallis, Oregon which is known for its high quality living environment. Corvallis is home to Oregon State University and offers a variety of recreational activities with ocean beaches and mountains within easy driving distance.

Our excellent compensation and benefits package includes cash profit sharing, stock purchase and retirement plans, flexible work hours, and educational assistance. If you are qualified and interested in a challenging position with a leading company in a high growth industry, please send your resume and cover letter referencing the job title you are applying for to: **Employment Response Center, Hewlett-Packard Company, Attn: Ad #0404, 3000 Hanover Street, MS 20AZ, Palo Alto, CA 94304-1181.** Hewlett-Packard Company is an equal opportunity/affirmative action employer.



## **Biotechnology**

### **Microbiologist/Anaerobic Bacteriologist**

Performs basic and applied research in the field of bioremediation. Chief duties involve the cultivation, identification and characterization of aerobic and anaerobic microorganisms isolated from soil and water. A major responsibility will be the establishment and maintenance of a collection of microbial isolates. Working knowledge of the operation and maintenance of anaerobic cultivation systems and knowledge of the principles and practices of mycology and bacteriology are needed. BS or MS in microbiology or a biological science with 1-4 years of related experience is required.

### **Petroleum Microbiologist**

Initiates and performs basic and applied research in the fields of bioremediation and petroleum microbiology. Emphasis is on the application of microbiology to existing and future problems of environmental abatement of hydrocarbon and substituted hydrocarbon compounds. Develops bioremediation and bioconversion processes and conducts laboratory and field studies for the biotransformation of PCBs, mineral oil, etc. Serves as a consultant to senior manager, authors scientific articles for peer-reviewed journals and delivers technical presentations at scientific meetings. A PhD in microbiology with emphasis in petroleum microbiology or MS degree in microbiology with 10 years relevant experience is required.

These positions are at our Muscle Shoals location which is on the Tennessee River in northwest Alabama. For consideration, please submit a resume to:

---

**Employment Services  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902**

TVA is an equal opportunity employer. Selections will be made on the basis of merit and efficiency as set out in the TVA Act and applicable laws prohibiting discrimination in Federal employment. TVA may consider for employment only U.S. citizens and others eligible for payment under applicable statutes.

# **Biotechnology and Pharmaceutical Industry: EAST COAST RESEARCH EXPLOSION!**

**April 1, 1994**

**A**merica's East Coast is exploding with leading edge research that will revolutionize the way we live in the next century.

Only SCIENCE is there to give readers an inside look at the rapid expansion of new biotechnology and pharmaceutical research. SCIENCE takes readers inside top US East Coast companies in Cambridge, Massachusetts; New Jersey; Long Island, New York; Maryland and the Research Triangle in North Carolina. SCIENCE tells about fast track career opportunities and how scientists can get those jobs.

If you want to reach the leading scientific talent with your recruitment advertisements, you'll need to place a full-page ad in this exciting special advertising section of SCIENCE.

There's only one SCIENCE, and only one opportunity to be a part of the East Coast Biotechnology and Pharmaceutical special advertising section. Call today to reserve your space!

## **You Get More in SCIENCE.**

Here's what you get when you place your full-page advertisement in the East Coast Biotechnology and Pharmaceutical Special Advertising Section:

- Bonus distribution at 1994 Biotechnology & Pharmaceutical Job Fairs in these locations:
  - April 22-23, Cambridge, Massachusetts
  - May 13-14, Chevy Chase, Maryland

PLUS, unbeatable bonus distribution to these hot scientific meetings:

- April 10-13, American Association for Cancer Research, San Francisco, California
- April 24-28, Experimental Biology (FASEB), Anaheim, California

- Priority placement within the editorial section.

## **Reserve Your Space Today!**

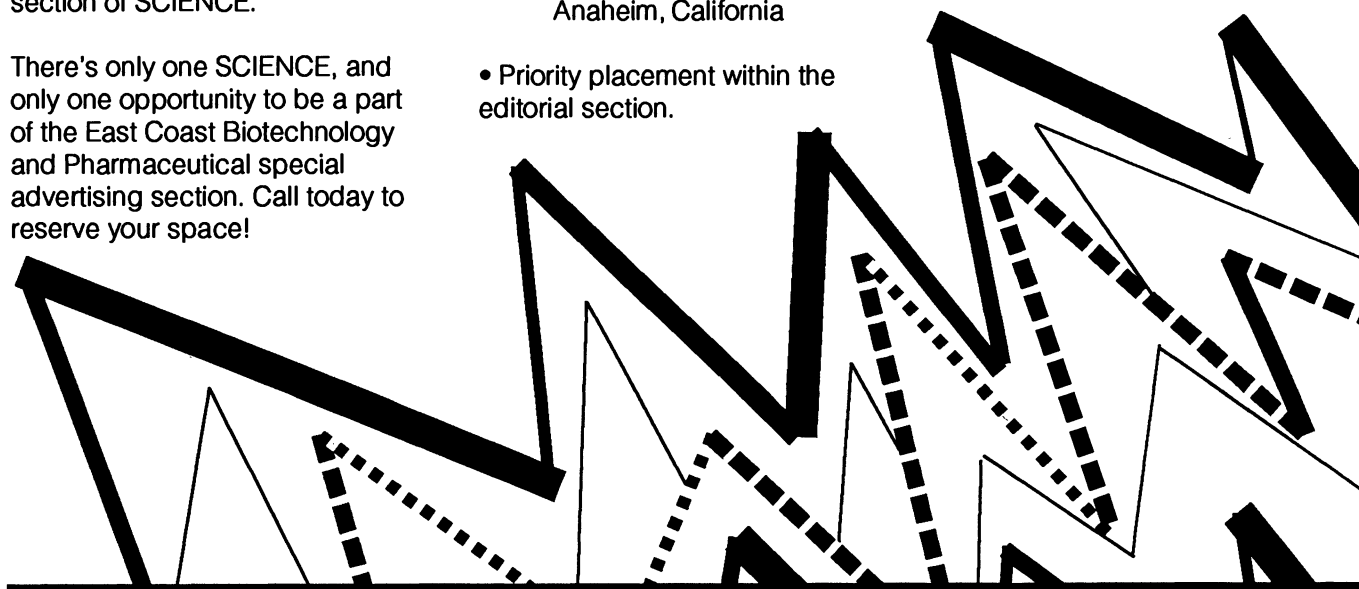
**In the US and Canada:** Call Janis Crowley at (212) 496-7704, or fax: (202) 682-0816.

**In Europe:** Call Annemarie Vis at (+44) 0223 302067, or fax: (+44) 0223 302068.

**In Australia:** Call Keith Sandell at (+61) 02922 2977, or fax: (+61) 02922 1100

**Call for  
space availability**

**SCIENCE**  
THE GLOBAL WEEKLY OF RESEARCH



# Research Scientist

## Organic Chemistry

GLYCOMED is the leader in the discovery and development of a new class of pharmaceuticals based on complex carbohydrates. We are seeking an experienced Organic Chemist for our Medicinal Chemistry Department.

You will design, synthesize and modify glycosaminoglycans and other complex carbohydrate structures and analogs for evaluation in bioassays and animal models. You'll also participate in R&D project teams working on the development of glycomimetics™ — carbohydrate-based drugs which mimic the biological effects of complex carbohydrates.

Requires a PhD in Organic Chemistry and a minimum of 2 years of post-graduate experience in the synthesis and manipulation of complex carbohydrates. Experience in the synthesis of glycosaminoglycan oligosaccharides and in the chemical modification of glycosaminoglycans would be an asset. BS or MS and 8+ years' relevant experience will also be considered.

Glycomed offers a competitive compensation and benefits package, including stock options. Send resume and cover letter to: **Manager of Human Resources, Glycomed Incorporated, 860 Atlantic Avenue, Alameda, CA 94501. EOE.**



## BIOTECH/PHARMACEUTICAL SPRING JOB FAIRS

**La Jolla / San Diego March 25 & 26**

*Participating companies include—* Amgen • Agouron • Advanced Tissue Sciences • Sugen • Cell Therapeutics • Pfizer Central Research • Gen-Probe • Systemix • Houghton Pharmaceuticals • Ligand Pharmaceuticals • Torrey Pines Institute for Molecular Studies • Depotech • Allergan •

Companies will meet qualified candidates with backgrounds in Biotechnical and Pharmaceutical Research & Development, Manufacturing, Validation, QA/QC, Clinical Research, Regulatory Affairs, and many other positions in biology and chemistry. For more information call Career Connection. Qualified candidates should FAX or send their resumes to Career Connection.

**Boston / Cambridge April 22 & 23**

*Participating companies include—* Genzyme • FDA • Serono Labs • Sugen • Systemix • Gen-Probe • Pfizer Central Research • Bristol-Myers, Squibb • Biopure • Baxter • Repligen

**CAREER CONNECTION**

Dept. SM-394

P.O. Box 7451, THOUSAND OAKS, CA. 91359  
(800) 967-0020 FAX (805) 494-1870

**Seattle's First Biotech Fair April 20 & 21**

### Department of Energy Human Genome Program Announcement

Program Notice 94-13: Human Genome Program - Ethical, Legal, and Social Implications

The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE), announces\* its interest in receiving applications in support of the Ethical, Legal, and Social Implications (ELSI) subprogram of the Human Genome Program (HGP). The HGP is a coordinated, multidisciplinary, goal-oriented research effort aimed at improving technologies that will lead to a detailed understanding of the human genome at the molecular level. This particular research notice encompasses research grants that address ethical, legal, and social issues that may arise from the use of information and knowledge resulting from the HGP. The DOE especially encourages the submission of applications to conduct multidisciplinary, empirical research on privacy issues from the creation, use, maintenance, and disclosure of genetic information. This may include (but is not limited to) issues of ownership and control of genetic information and the protection of the privacy of genetic information in various settings including the workplace. Applications should demonstrate knowledge of the relevant literature, and should include detailed plans for the gathering and analysis of factual information and the exploration of issues associated with the ethical, legal, and social implications of the knowledge gained from the HGP. All applications should include, where appropriate, detailed discussion of human subjects protection issues; e.g., storage of, manipulation of, and access to data. Where survey techniques are proposed, provisions to ensure the inclusion of women, minorities, and potentially disabled individuals must be described, unless specific exclusions are scientifically necessary and justified in detail. All proposed research applications should address the issue of efficient dissemination of results to the widest appropriate audience.

The DOE is also soliciting applications for the preparation and dissemination of educational materials in any appropriate medium that will enhance public understanding of both the scientific aspects and the ethical, legal, and social implications of the HGP. In addition, the DOE is encouraging applications for the support of conferences focusing on specific issues or areas of concern related to the ethical, legal, and social implications of the HGP. Educational and conference applications should also demonstrate awareness of the relevant literature, and include detailed plans for the accomplishment of project goals, including, where appropriate, video productions. In the case of educational (pg 8185) activities, the DOE strongly recommends inclusion of assessments of effectiveness of the proposed activities. In the case of all conferences, a fairly detailed and complete roster of committed speakers is necessary. At the completion of the conference, a summary or report is required. Educational and conference applications must also demonstrate awareness of the need to reach the widest appropriate audience.

Potential applicants are strongly encouraged to submit a brief preapplication that consists of two to three pages of narrative describing the research project objectives and methods of accomplishment. Telephone and FAX numbers are required and electronic mail addresses are desirable. The preapplications will be reviewed relative to the scope and research needs of the DOE's Human Genome Program. They should be received by April 15, 1994. The 1st class US mail address is: Dr. Daniel W. Drell, attn. Program Notice 94-13, Office of Health and Environmental Research, ER-72 (GTN), Washington, DC 20585. For express deliveries, address to D.W. Drell (phone# 301/903-6488), attn. 94-13, US Dept. of Energy, 19901 Germantown Road, Germantown, MD 20874. Address submissions by electronic mail to [genome@oerhp01.er.doe.gov](mailto:genome@oerhp01.er.doe.gov) (in ASCII text please). A response to the preapplications discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt. Materials for preparation of the formal applications will be returned with the responses. Formal applications are due July 14, 1994.

\*The full text of "Energy Research Financial Assistance Program Notice 94-13: Human Genome Program-Ethical, Legal, and Social Implications" is in the FEDERAL REGISTER, Vol. 59, No. 34, Feb. 18, 1994, p8184-5.

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH IN PATHOLOGY

A postdoctoral position is immediately available to study the pathogenesis of a *Chlamydia trachomatis* genital infection. Experience in protein chemistry, recombinant DNA, immunology, vaccine development and animal models is desired. Send curriculum vitae and names and addresses of three references to: **Luis M. de la Maza, M.D., Ph.D., Professor, Department of Pathology, Medical Sciences I, D 440, University of California, Irvine, CA 92717-4800.** The University of California, Irvine, is an Affirmative Action/Equal Opportunity Employer and specifically invites and encourages applications from women and minorities.

**MOLECULAR BIOLOGIST POSITION. POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE;** (several years of experience), for Molecular Biologist to work on gene construction and expression of model proteins for studying protein function. Please call or send résumé to: **Dr. Dan W. Urry, Director, Laboratory of Molecular Biophysics, The University of Alabama at Birmingham, P.O. Box 300, Birmingham, AL 35294. Telephone: (205) 934-4177 or 4178.** An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL FELLOWSHIP

Position available in cellular and molecular neurobiology for an M.D. or Ph.D. Research projects involve investigations of mechanisms of neuronal injury and cell death and the elaboration of methods to stimulate or enhance regeneration. Related studies utilize *in vitro* and especially *in vivo* animal models of human neurodegenerative diseases that affect cognitive and motoric functions. A good background in neurobiology and familiarity with molecular and/or neuroanatomical methods are desirable. Please, U.S. citizens or permanent residents only (because of funding limitations). Send curriculum vitae and references to: **Donald L. Price, M.D., Neuropathology Laboratory, The Johns Hopkins University School of Medicine, 558 Ross Research Building, 720 Rutland Avenue, Baltimore, MD 21205-2196.** Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities encouraged to apply.

### POSTDOCTORAL FELLOW POSITION

Position is immediately available to study cellular mucosal immunity in HIV infection. Applicants with Ph.D. or M.D. experienced in HIV virological and immunological assays are preferred. Send curriculum vitae and the names and addresses of 3 references to: **Julie McElrath, M.D., Ph.D., Department of Medicine, University of Washington, Pacific Medical Center, 1200 12th Avenue South, Seattle, WA 98144. FAX: (206) 326-4178. Telephone: (206) 326-4177.**

### INSTITUTE OF ECOSYSTEM STUDIES CARY POSTDOCTORAL FELLOWSHIP IN ECOLOGY

The Institute of Ecosystem Studies announces the availability of the Cary Postdoctoral Fellowship in Ecology for fall 1994. The Fellow will interact with a diverse group of ecologists and ecosystem scientists. The Fellowship is for one year and may be renewed for a second year. Applicants must have a Ph.D. Submit a statement of research interests, curriculum vitae, and three letters of reference to: **Dr. Peter M. Groffman, Institute of Ecosystem Studies, Box AB, Millbrook, NY 12545.** Deadline for applications: 1 June 1994.

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

### POSTDOCTORAL FELLOWSHIP

The Laboratory of Growth & Development, California Pacific Medical Center of San Francisco, is seeking a professional to continue investigations on the recently discovered regulation of immune functions by insulin-like growth factors. The focus of this lab has been on the biologic functions of the insulin-like growth factors and their binding proteins. Immunologic investigations represent a new and challenging extension of our research. The stipend is \$25,000 and includes full benefits. Travel to at least one meeting a year will be supported. Send résumé to: **E. Martin Spencer, M.D., Ph.D., Director, Laboratory of Growth & Development, CPMC, P.O. Box 7999, San Francisco, CA 94120.** Equal Opportunity Employer.

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH FELLOW.** A position is available for a Postdoctoral Fellow at the UF/USAID/SADC Heartwater Research Project in Harare, Zimbabwe. The applicant must have a Ph.D. in Cellular Immunology or postdoctoral training in Cellular Immunology. In addition, experience in the field of cytokine research and their effects *in vivo* and *in vitro* would be an advantage. Applicants must supply full curriculum vitae and name and addresses of three referees by April 10, 1994, to: **Dr. Suman Mahan, Chief-of-Party, UF/USAID/SADC, Heartwater Research Project, P.O. Box 8101, Causeway, Harare, Zimbabwe. Telephone/FAX: 263-4-794980, or Dr. A.F. Barbet, University of Florida, College of Veterinary Medicine, P.O. Box 110880, Building 471, Mowry Road, Gainesville, FL 32611-0880, U.S.A. Telephone: (904) 392-4700, extension 5819, FAX: 110 1 904-846-0246.** The University of Florida is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL FELLOW.** This position is available immediately to study the role of Phospholipases and GTP binding proteins in signal transduction mechanisms in iris smooth muscle. The applicant must have a Ph.D. in Biochemistry of Pharmacology and some experience in the field of second messengers. Send curriculum vitae and names of three references to: **Dr. Ata Abdel-Latif, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100.** An Equal Opportunity/Affirmative Action Employer.

### MOLECULAR REPRODUCTIVE BIOLOGY

**POSTDOCTORAL RESEARCH ASSOCIATE** positions are available to work on endocrine regulation of human fetoplacental unit, reproductive tract, brain, nuclear receptors for protein hormones and nuclear eicosanoid biosynthetic enzymes. Candidates with working experience in cell culture, various blotting techniques, nuclear run on transcription, *in vitro* transcription and translation, mRNA stability measurements, RT-PCR, construction of antisense expression vectors, transfections, deletional, gel shift and DNase I footprinting analyses of 5'-flanking region of genes are encouraged to apply. **Dr. C.V. Rao, Department of Ob/Gyn, 438 MDR Building, University of Louisville Medical Center, Louisville, KY 40292. FAX: (502) 852-0881.**

### MOLECULAR BIOLOGISTS SIGNAL TRANSDUCTION

**RESEARCH ASSOCIATE POSITIONS:** Highly experienced and productive individuals wanted to investigate signal transduction pathways (PKC, raf-ras, lipid second messengers) or cell cycle-dependent regulation of phospholipid biosynthesis in yeast. Doctorate required. Send curriculum vitae, references and list of publications to: **Dr. Robert M. Bell, Chairman, Department of Molecular Cancer Biology, Duke University Medical Center, Box 3711, Durham, NC 27710.** Deadline for applications is April 18, 1994. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE

**POSTDOCTORAL POSITION** available immediately! Study molecular mechanisms of intestinal apolipoprotein expression and lipoprotein biogenesis with NIH-funded investigation. Experience in cell culture and molecular biology essential.

Send curriculum vitae and references to: **Arkansas Children's Hospital, Attention: Catherine Mulford, 800 Marshall Street, Little Rock, AR 72202-3591; or FAX: (501) 320-3499.** Equal Opportunity Employer.

**RESEARCH ASSOCIATE/POSTDOCTORAL POSITION:** Available July 1, 1994, to study cellular and molecular mechanisms of gastrointestinal motility. Candidates with training in radioreceptor assays, cell and tissue culture, patch clamping, G proteins, signal transduction, immunological, and molecular biology techniques preferred. Please send curriculum vitae and references to: **Dr. S.K. Sarna, Department of Surgery, Medical College of Wisconsin, 9200 West Wisconsin Avenue, Milwaukee, WI 53226.** Equal Opportunity/Affirmative Action Employer, M/F/D.

## POSITIONS OPEN

### RESEARCH STAFF POSITIONS

The Immunohematology/Immunochemistry Research Program of the Blood Research Institute, the Blood Center of Southeastern Wisconsin seeks qualified individuals (M.D., Ph.D., and/or M.D./Ph.D.) with research interests in either immunohematology or vascular biology plus experience/expertise in molecular biology, protein chemistry or cell biology. Candidates for postdoctoral fellowship training or for staff appointment will be considered. Please send résumé and reference to: **Peter J. Sims, M.D., Ph.D., Associate Director, Blood Research Institute, The Blood Center of Southeastern Wisconsin, P.O. Box 2178, Milwaukee, WI 53201; FAX: 414/937-6284.** Equal Opportunity Employer—M/F/H/V.

### KBB, INC.

KBB, Inc. is a small, multidisciplinary research and development company located in Northern Virginia. Our specialty is the application of state-of-the-art technology to solving our customers' problems. We are looking for creative, highly motivated scientists with a strong record of achievement in either private industry or academia.

**Molecular Biology.** Several positions are available. Candidates must have a B.S. in biology with strong laboratory skills and 2 to 5 years of experience in PCR, DNA sequencing and genetic identification technologies.

**Research Chemist.** Candidates must have a B.S. in chemistry or related field with at least 5 years of hands-on research experience.

**Explosives Chemist.** Position requires at least a B.S. in chemistry or related field with at least 5 years of experience in explosives formulation and testing.

**Computer Scientist.** Candidates should have a B.S.-Ph.D. in computer science. At least 5 years of experience is required in the design and implementation of AI systems.

Qualified candidates may send their résumés to: **KBB, Inc., P.O. Box 12, Oakton, VA 22124.** An Equal Opportunity Employer, M/F/H/V.

**NEUROSCIENTIST/NEUROPATHOLOGIST:** The New York Hospital-Cornell Medical Center Department of Pathology is searching for a neuroscientist (M.D. or M.D./Ph.D.) who is Board certified or Board eligible in neuropathology. The individual would be expected to develop an independent basic science research program capable of generating external funding. Other responsibilities would include participation in the diagnostic neuropathology service and in the teaching of residents and medical and graduate students. Financial support is available to help establish new research programs. Strong programs in neurology and neuroscience at the institutions of neighboring Rockefeller University and Memorial Sloan-Kettering Cancer Center offer outstanding opportunities for collaboration. Academic rank and salary will be commensurate with experience and scholarly accomplishments. Interested candidates should submit curriculum vitae and the names of three references to: **Dr. Daniel M. Knowles, Professor and Chairman, Department of Pathology, The New York Hospital-Cornell Medical Center, 525 East 68th Street, New York, NY 10021.** Cornell University Medical College is an Affirmative Action/Equal Opportunity Employer.

### PEDIATRICS NEWBORN SERVICES

The Department of Pediatrics at the University of Michigan is seeking two developmental biologists, Neonatologists for the Section of Newborn Services in the Department of Pediatrics, University of Michigan, research or tenure track (Research Investigator through Research Scientist or Lecturer through Professor, respectively). The two individuals must have a strong background in molecular biology with a career commitment to laboratory research in neonatal-perinatal biology. M.D., M.D./Ph.D., or Ph.D. will be considered. Newly constructed research space/facilities available. Interested applicants should contact: **Roger G. Faix, M.D., Box 0254, L3023 Women's Hospital, University of Michigan Medical Center, 200 East Hospital Drive, Ann Arbor, MI 48109-0254. Telephone: (313) 763-4109.** The University of Michigan is an Equal Opportunity/Affirmative Action Employer.



# Chiron Up-Close

Transforming the practice of medicine  
Researching scientific frontiers  
Applying the benefits of technology  
Building sustainable businesses  
Supporting a global organization  
Teaming together to solve problems

Take a close look at biotechnology and the solutions that are being developed here. The most important, the most widely recognized and applauded include our work in cancer and serious infectious diseases. Now you can contribute to our leading-edge therapeutic and diagnostic success and help us to continue to change the way the most critical diseases are understood and treated.

## Look closely, and you'll see your own success!

You can participate in any of these areas:

• Engineering • Information Systems • Manufacturing • QA/QC • Research and Development

If you'd like more information on how to find your own success here at Chiron, write to:

Chiron Corporation, Human Resources, Box #IWIS, 4560 Horton Street, Emeryville, CA 94608.

We are an equal opportunity employer.



CHIRON



Novo  
Nordisk  
Biotech  
Inc.



**Novo Nordisk Biotech, Inc.**, an applied research institute, has been established as a wholly owned subsidiary of Novo Nordisk A/S, a major international Danish industrial biotechnology and pharmaceutical company. Novo Nordisk Biotech, Inc., located in Davis, CA, is focusing on the cloning, expression, mutagenesis and characterization of industrial enzymes.

## Scientist, Protein Chemistry/Enzymology

Ph.D. in Biochemistry or related field with post-doctoral experience and a background which includes organic or bioorganic chemistry. Candidates must also have a strong background in protein chemistry including the areas of protein purification and enzymology. Experience working with proteases would be advantageous.

The successful candidate will be responsible for protein purification, biochemical characterization, enzyme kinetics and structure-function studies within a project team.

*If you are interested in a challenging research position with the world's leading producer of industrial enzymes and meet the above criteria, please send your C.V. with a list of three references for consideration, in confidence, to: Novo Nordisk Biotech, Inc., Department of Human Resources, 1445 Drew Avenue, Davis, CA 95616. We are an Equal Opportunity Employer.*

## THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

The Division of Natural Sciences and Mathematics is seeking individuals to fill several teaching positions for Fall 1994. Stockton is a state-supported undergraduate, liberal arts and sciences college located in the New Jersey Pine Barrens near Atlantic City, one hour from Philadelphia. The area offers unique research opportunities because of its location and the installation of a major geothermal heating and cooling system. Majors are available in Biology, Chemistry, Environmental Studies and Geology, Marine Science, Mathematics and Physics; a combined-degree Engineering program is growing rapidly. All faculty teach in program and general studies areas, do research involving students, and participate in college activities. Applicants should have completed the doctorate or be in the last stages of completion. Salary range is \$28,801-\$36,603 for full-time and \$14,400-\$18,301 for half-time; salary may be higher depending on qualifications, experience and increases in the New Jersey Higher Education Compensation Plan.

**BIOLOGY: Prokaryotic Molecular Biology/Biotechnology and Microbiology.** Instr./Asst. Prof., Tenure-Track. Teaching includes General Biology, Genetics, Microbiology, Prokaryotic Molecular Biology/Biotechnology.

**CHEMISTRY: Applied Instrumental Chemistry.** Instr./Asst. Prof., Tenure-Track. Teaching includes Introductory Chemistry, Laboratory Methods, student-based research; environmental emphasis preferred.

**GEOLOGY: Mineralogy, Petrology, Geochemistry.** Instr./Asst. Prof., Half-time. Teaching includes introductory course for non-majors, Physical Geology, Mineralogy, Petrology, Geochemistry with an environmental emphasis.

**PHYSICS: Introductory Physics for major and non-majors.** Instr./Asst. Prof., One Half-Time position and One Full-Time, One-Year position. Teaching lectures and laboratories in Physics for Life Sciences, Physics for Environmental Sciences, and Physics for Physical Sciences.

Screening begins March 31, 1994. Send letter of application, resume, three letters of recommendation, and evidence of completion or expected date of completion of Ph.D. to Dr. Barbara Byrne, Dean of Natural Sciences and Mathematics, Richard Stockton College of New Jersey, AA29, Pomona, NJ 08240. Stockton is an AA/EOE. Women and minorities are encouraged to apply. R403558



## STRESSGEN

BIOTECHNOLOGIES CORP.

STRESSGEN Biotechnologies is a dynamic and growing biopharmaceutical company devoted to the medical applications of the cellular stress response. STRESSGEN has initiated R&D programs aimed at producing stress protein-based immunotherapeutic agents for the treatment of cancer and the prevention of infectious disease.

### Vice President Research and Development

We are currently seeking a creative, articulate, hands-on research leader who is capable and motivated to help build a successful stress protein-based vaccine program.

The individual we seek will have extensive experience in vaccine development. The successful candidate will have a Ph.D. and/or M.D. in a medically related discipline such as molecular biology, cellular immunology, biochemistry or cellular biology. A minimum of 8 years experience in the management of multidisciplinary research and development functions is mandatory. A solid understanding of research strategy and vaccine development is essential. A track record that includes successful management of research programs resulting in products taken to the IND stage is preferred.

Located in Victoria, British Columbia, STRESSGEN offers a challenging and stimulating scientific environment in the natural setting of Vancouver Island. STRESSGEN offers a generous benefits package and competitive salary for this position.

Please send C.V. with references and salary requirements to:

**Manager, Human Resources**  
**STRESSGEN Biotechnologies Corp.**  
120-4243 Glanford Avenue, Victoria, B.C., V8Z 4B9

## THE LIPOSOME COMPANY

*The Liposome Company, a rapidly growing leader in the field of lipid-based drug delivery systems, has the following immediate opportunity available:*

### POST DOCTORAL/RESEARCH SCIENTIST

We are seeking an individual with 1-3 years' post-doctoral experience in Tumor Biology/Immunology and/or Pharmacokinetics and tissue distribution of drugs.

Responsibilities will include investigation of experimental therapeutics of human cancers in immunodeficient scid mice, drug delivery to human cancers and the role of host defense systems in anti-tumor responses. The qualified candidate will also have experience in the mechanisms of drug action and drug delivery systems.

*In addition to a creative environment, we offer a competitive salary and comprehensive benefits. Interested candidates please send your resume to: Human Resources Department, One Research Way, Princeton, NJ 08540. An Equal Opportunity Employer.*



THE  
**LIPOSOME**  
COMPANY, INC.  
EXPANDING THE HORIZONS OF  
BIOTECHNOLOGY™

# pssst...

**(Interested in a new position? Turn to page 1467.)**

It's no secret that you can find the best information on new career opportunities in SCIENCE. Each issue provides a comprehensive listing of open position descriptions from top pharmaceutical and biotechnology companies, as well as leading scientific and medical institutions. The way to uncover a rewarding future is to know where to look for the best career opportunities. SCIENCE gives you the chance to review intriguing open positions from all around the world in our weekly recruitment section and in our special sections, such as *Women in Science* and *Biotechnology/Pharmaceutical Careers*. The next time you consider a new position look in SCIENCE before the secret gets out!

# SCIENCE



**FACULTY  
POSITION  
MOLECULAR PATHOGENESIS**



The Department of Microbiology and Immunology at Eastern Virginia Medical School is seeking outstanding candidates for a tenure-track faculty position at the rank of **Assistant, Associate or Full Professor** in the area of Molecular Pathogenesis beginning March 1, 1995. We are seeking individuals who are employing molecular approaches to study pathogenic mechanisms of disease, including diagnostic and therapeutic strategies. Preference will be given to individuals working with viral systems, although individuals studying other systems are encouraged to apply. The successful applicants must have an independent, established and funded research program as well as experience in teaching medical and graduate students. Competitive salary, space and start-up packages are available. This is an excellent opportunity to join a group of existing faculty with active research programs in numerous areas of molecular and cellular biology including molecular genetics and pathogenesis of cytomegalovirus, oncogenes and tumor suppressor genes in cancer, signal transduction, gene regulation, cell growth and differentiation, cellular immunology, and prostate tumor biology and immunology. In addition, the Department is associated with a strong clinical and basic research program in infectious disease through the Department of Pediatrics. Interested applicants should send a curriculum vitae, a statement of research interests, relevant reprints and the names of four references by August 1, 1994 to: **Dr. Richard M. Stenberg, Chairman, Search Committee, Department of Microbiology and Immunology, P.O. Box 1980, Eastern Virginia Medical School, Norfolk, VA 23501. An Equal Opportunity/Affirmative Action Employer.**

**POSITION ADVERTISEMENT**

**TOXICOLOGIST**

The Department of Pharmacology  
School of Pharmacy  
University of Mississippi

The Department of Pharmacology is seeking to fill a 12-month tenure track Assistant / Associate Professor position. Applicant should have the Ph.D. in Toxicology, or in closely related disciplines with experience in toxicological research. The successful applicant is expected to develop and maintain a nationally recognized externally funded research program, and to teach and advise graduate level research and professional students. Training and / or experience in the application of molecular biological techniques to the effects of contaminants in aquatic, marine or terrestrial organisms are especially desired. The candidate will be expected to teach in the areas of molecular genetics and/or pharmacokinetics for undergraduate pharmacy students.

Initial application review will begin April 1; however, applications will be received until the position is filled. Salary is competitive, and based on experience and qualifications. Candidates should send curriculum vitae, representative reprints, a synopsis of their current and future research interests and teaching philosophy, and if available, a teaching portfolio, as well as the names, addresses, and telephone numbers of three references to:

Administrative Manager  
School of Pharmacy Business Office  
206W Faser Hall  
University of Mississippi  
University, MS 38677

The University of Mississippi is an Affirmative Action / Equal Opportunity / Americans with Disabilities Act Employer.

**RESEARCH SCIENTISTS**

**Triplex Pharmaceutical Corporation**, a rapidly growing, well-financed, biotechnology company focused on developing novel therapeutics for cancer and viral infections seeks key scientists in the following areas.

**SENIOR SCIENTIST-BIOCHEMISTRY**

The successful candidate will lead our efforts in designing improved triple helix forming oligonucleotides. This will require a strong background in nucleic acid chemistry, extensive experience in nucleic acid-nucleic acid/protein interactions and familiarity with molecular modeling, particularly as it relates to oligonucleotide interactions.

**SENIOR SCIENTIST-ONCOLOGY**

The focus of research will be oligonucleotide-mediated repression of transcription of genes important in the development of human cancers. The qualified applicant will have proven expertise in genetics and molecular biology of cancer, along with experience in cell growth, metastasis or angiogenesis. Candidates should also have experience in protein biochemistry and tissue culture.

**SENIOR SCIENTIST-VIROLOGY**

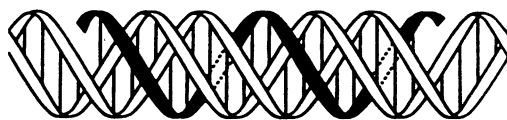
This position will contribute to the increased understanding of the efficacy and mechanism of action of oligonucleotide-based antiviral agents. The qualified applicant will have extensive experience in molecular virology with an emphasis on hepatitis (HBV) or herpes (HCMV) viruses. A strong background in the biology, genetics, molecular biology, biochemistry or immunology of viral infections *in vitro* and *in vivo* is also required.

**POST-DOCTORAL RESEARCH SCIENTIST -  
OLIGONUCLEOTIDE CHEMISTRY**

The successful candidate will participate in the preparation and characterization of novel oligonucleotide conjugates to enhance the affinity and cellular uptake of triple helix forming oligonucleotides. A Ph.D. in Organic/Biochemistry and previous experience in oligonucleotide synthesis is required.

All Senior Scientist positions require Ph.D. degrees in Molecular Biology, Biochemistry, Biology or related field and 3-10 years postdoctoral experience. The ability to exercise leadership and initiative as well as contribute to project development and extra-mural collaborations in a fast-paced, multi-disciplinary environment is essential for all positions.

**TRIPLEX** is located in an attractive community north of Houston offering access to the Baylor College of Medicine, Texas Medical Center, Rice University and the University of Houston. The Company offers competitive salaries and benefits as well as opportunities for publication and rapid career growth in an exciting research program. For immediate consideration, send CVs with references to: Human Resources Manager, Triplex Pharmaceutical Corporation, 9391 Grogan's Mill Road, The Woodlands, TX 77380/Fax: 713/363-1168. *Equal Opportunity Employer.*



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

Pioneer is seeking applicants for our ongoing program of crop improvement.

**POST DOCTORAL, Discovery Research (JOB #JJ / TM - JORGENSEN)** - A post doc position is immediately available in the area of ligand-receptor interactions. **EDUCATION / EXPERIENCE:** PhD in biochemistry or related field with experience in the characterization of receptor / ligand interactions.

**SENIOR RESEARCH ASSOCIATE, Vegetable Seeds (JOB #1354 - A - BLACKETER).** The successful applicant will have experience in transformation / cell biology in cucurbits, tomato or other vegetable or fruit species to complement our ongoing plant improvement program in these species. Demonstrated ability to complete projects in a timely manner is a must. In addition, a working knowledge of molecular biology and analysis of transgenes in plants would be an asset. This staff position is an integral part of the Pioneer Vegetable Genetics research program to produce proprietary products in targeted species and regions worldwide. Project areas will complement the business needs of the project. Strong interpersonal skills will be required to develop collaborations both within Pioneer Hi-Bred's extensive research program and external public and private organizations. **EDUCATION / EXPERIENCE:** MS or equivalent in cell or molecular biology or a related field plus 4 years of relevant research experience. Experience in running field tests of transgenic organisms and experience in using computers are desirable.

**SENIOR RESEARCH ASSOCIATE, Gene Expression (JOB #1376-A-JORGENSEN).** The primary responsibility of this position is to isolate and characterize promoters and other regulatory elements contributing to both general and tissue-preferred gene expression, for use in designing and constructing plant transformation vectors for use in developing insect resistant maize varieties. The successful candidate will work both independently and with other individuals and research groups on design and execution of experiments, as well as on expression analysis and data interpretation. **EDUCATION / EXPERIENCE:** MS degree or equivalent in molecular biology, genetics, or related field, plus at least 4 years of directly relevant research experience. Applicants should have a) experience with standard molecular biology techniques including DNA and RNA isolation, cloning, library construction and screening, PCR, etc., b) familiarity with computers and sequence analysis methods and c) good organizational and communication skills.

Applications received by April 8, 1994 will be assured of consideration. However, applications will be considered until the positions are filled.

Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment. Pioneer Hi-Bred International, Inc. is an Equal Opportunity employer. Please send TWO sets of resume information for each position you are applying. Indicate the JOB # on the envelope and your correspondence including the names, addresses and telephone numbers of three references to:



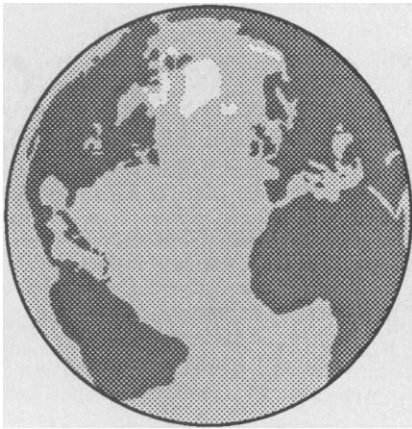
**PIONEER**

**PIONEER HI-BRED INTERNATIONAL, INC.**  
Trait and Technology Development  
P.O. Box 38  
Johnston, IA 50131-0038

## ***Attention Non-US Advertisers!***

**SCIENCE** is pleased to  
announce the introduction of the  
1994 pounds Sterling rate card!

*Advertisers not based in the United States can now choose to pay either in  
US dollars or pounds sterling - whichever is more convenient!*



# **SCIENCE**

continues its surge in the  
global marketplace,  
meeting the needs of  
advertisers.

We're proud of our 61% growth in the  
Non-US market since 1990!

Contact your advertising representative for more information:

European Recruitment Advertising:  
Annemarie Vis: +44 223 302067

European Product Advertising:  
Tracy Peers: +44 270 760108  
or Andrew Davis: +44 457 838519

**ASSISTANT PROFESSOR OF  
ECOSYSTEM ECOLOGY  
LIFE SCIENCES PROGRAM**

**ARIZONA STATE UNIVERSITY (ASU) WEST:** The Life Sciences program invites applications for a full-time tenure-track position as **ASSISTANT PROFESSOR OF ECOSYSTEM ECOLOGY.** Requirements: A PhD in Ecology; potential for scholarly achievement, innovative teaching, and service to the campus, the community, and professional organizations; a teaching and research program that investigates the roles of plant and animal species in terrestrial arid-zone ecosystems by employing both biogeochemical and metabolic approaches to ecosystem analysis; experience in interdisciplinary ecological consulting. **Position Description:** An individual who blends basic and applied aspects of terrestrial arid-zone ecosystem ecology and who will initiate an ecological consulting program in Arizona that involves undergraduate and graduate students. The successful candidate will be expected to develop an innovative, interdisciplinary Arts & Sciences teaching program for majors and non-majors, and to establish an externally funded research program involving undergraduate and graduate students. Send letter of application, vitae, brief statements of research and teaching goals, and the names, addresses, and phone numbers of three references to: **ECOSYSTEM SEARCH COMMITTEE, Life Sciences Program (2352), Arizona State University West, PO Box 37100, Phoenix, AZ 85069-7100.** Application deadline: April 30, 1994 or the 15th of each ensuing month until the position is filled. Position starting date: On or after August 16, 1994. *The Life Sciences program at ASU West actively seeks diversity among its employees and students. An Equal Opportunity / Affirmative Action employer.*

**S C I E N T I S T S**

**The excitement of pharmaceutical development backed by \$500 million annually in R & D...**

***That's Schering-Plough***

*The fulfillment of seeing your ideas happen. At Schering-Plough, we invest over \$500 million annually to advance the process of discovery and development. To the dedicated scientist, this means a greater opportunity to see your work extend and enhance lives the world over.*

**SENIOR SCIENTIST/  
BIOCHEMICAL  
ENGINEER**

***Fermentation  
Process Development***

As a member of our Biotechnology Development operation in Union, NJ, you will participate in challenging projects involved in laboratory and pilot plant scale-up for the development and improvement of microbial fermentation processes. This will include the integration of microbial genetics and physiology fundamentals with fermentation engineering principles.

To qualify, you must have a PhD in Microbiology or Biochemical Engineering and solid knowledge of recovery processes (filtration, centrifugation, extraction and cell disruption). As this position has supervisory responsibility, good interpersonal skills and/or supervisory experience would be a strong asset.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume with salary requirements to: Human Resources Manager, Dept. BD94-02/SC, Schering-Plough Research Institute, 1011 Morris Avenue, Union, NJ 07083. We are an equal opportunity employer.



**Schering-Plough  
Research Institute**

*U s i n g   S c i e n c e   F o r   H u m a n   A d v a n t a g e*

**CELLULAR & MOLECULAR  
PHYSIOLOGY  
THE UNIVERSITY OF IOWA**

Applications are invited for faculty positions at the **ASSISTANT, ASSOCIATE** or **FULL PROFESSOR** level in an expanding research-based department. Candidates should be prepared to establish an independent program of excellence in cellular and/or molecular physiology research complementing areas of departmental strength. These include developmental biology, eukaryotic gene expression, molecular endocrinology, neurobiology, signal transduction, imaging of physiological processes, and function of ion channels and membrane proteins. Excellent opportunities exist for participation in established interdepartmental programs in Molecular Biology, Neuroscience, Immunology and Genetics and in Cardiovascular, Diabetes/Endocrinology and Cancer Centers. Start-up funds and salary are competitive. Minimum requirements are a Ph.D. or M.D. degree and two years of relevant postdoctoral training. Screening begins April 1. Send curriculum vitae, description of research, reprints of recent publications and three letters of recommendation to:

**Dr. Deborah L. Segaloff, Chair  
Cellular and Molecular Physiology  
Search Committee  
Department of Physiology  
and Biophysics  
The University of Iowa  
College of Medicine  
Iowa City, Iowa 52242-1109**

The University of Iowa is an Equal Opportunity/Affirmative Action Employer.  
Women and Minorities are Encouraged to Apply.

**MEHARRY MEDICAL COLLEGE**

*presents*  
**The Eleventh Symposium:  
"Recent Advances in  
Immunology, Biochemistry, and  
Molecular Biology  
of  
Tropical Diseases:  
International Health"  
Monday, April 4, 1994  
8:00 a.m. - 5:00 p.m.**

The School of Graduate Studies and Research and The Division of Biomedical Sciences present a one-day symposium on the Meharry campus. This symposium brings together molecular biologists, immunologists and biochemists in the southeastern region of the United States who share an interest in parasitic disease research.

The presenters and topics for the six sessions are: **RONALD BLANTON, M.D.**, (Case Western Reserve University), "*Schistosome Serine Protease Inhibitors*;" **MANUEL PATARROYO, M.D.**, (Instituto de Immunologia, Bogota, Colombia), "*Malaria Vaccine*;" **WILLIAM BERTRAND, Ph.D.**, (Tulane University School of Public Health), "*Computer Based Learning in Tropical Disease Research*;" **LEE RILEY, M.D.**, (Cornell University Medical College), "*Molecular Biology of Tuberculosis*;" **DON HARN, Ph.D.**, (Harvard School of Public Health), "*Specific Oligosaccharides in Schistosomiasis*;" **DANIEL COLLEY, Ph.D.**, (Centers for Disease Control and Prevention), "*Idiotypic Interactions and Schistosomiasis*."

**Registration ...** The registration fee for the symposium is \$75 with graduate students paying \$30. *For more information call:* **Dr. George C. Hill, Director, Division of Biomedical Sciences, Meharry Medical College, Nashville, TN 37208, (615) 327-6193 phone, (615) 321-4694 fax, INTERNET / HILLGEG75@CCVAX.MMC.EDU.**

## POSITIONS OPEN

### POPULATION DYNAMICIST

The Population Dynamics Branch of NOAA's Northeast Fisheries Science Center, Woods Hole, Massachusetts, seeks a Population Dynamicist/Stock Assessment Scientist to conduct research on the effects of exploitation and environmental variability on single- and multispecies fisheries. The Branch is a recognized Center of excellence in fishery population dynamics research and stock assessment, and maintains extensive historical data in a UNIX-based computing facility. Closing date is April 15, 1994. To apply, contact:

Ms. Kathryn McArthur, NOAA, EASC  
253 Monticello Avenue  
Norfolk, VA 23510  
Telephone: 804-441-6880

Applicants must be qualified U.S. citizens. The U.S. Department of Commerce is an Equal Opportunity/Affirmative Action Employer.

### UNIVERSITY OF CALIFORNIA AT BERKELEY FUNGI CURATOR UNIVERSITY HERBARIUM

The University of California at Berkeley seeks an outstanding systematic mycologist with responsibilities as curator of fungi and lichens (Assistant Specialist, 11-months appointment) in the University Herbarium and as an Adjunct Assistant Professor in the Department of Plant Biology starting on or after July 1, 1994. Applications are invited from individuals whose research interests are in systematics ecology, and evolutionary biology of free-living and lichenized fungi. The successful candidate will be expected to provide public service in fungal identification, curate and enhance the Herbarium fungal collection, develop an independent research program, and participate in undergraduate and graduate-level instruction in the Department. Applicants must have a Ph.D. Starting salary will be approximately \$35,000. Full curriculum vitae, a statement of current research and future interests, a statement of curatorial and teaching experience, and three letters of reference, should be sent by April 15, 1994, to: Chair, Search Committee, Department of Plant Biology, 111, Koshland Hall, University of California, Berkeley, CA 94720. The University of California is an Equal Opportunity/Affirmative Action Employer.

**CARDIOVASCULAR PHYSIOLOGIST AT THE JUNIOR LEVEL**—The Department of Surgery, Deborah Heart and Lung Center, a private, non-profit institution, has a position available for a cardiovascular physiologist to work with cardiovascular surgeons in the cardiovascular system and muscle. This person must have a Ph.D., preferably in physiology with experience working in whole animal techniques and a good working knowledge of cardiovascular physiology. The applicant must have the capabilities of collaborating with other clinical and basic scientists. Experience in grant writing, as well as postdoctoral training are highly desirable. Interested persons should submit current curriculum vitae, 3 published papers or manuscripts, and addresses of three references. Beginning date: July 1, 1994. Send information to: Glenn W. Laub, M.D., Department of Cardiovascular and Thoracic Surgery, Deborah Heart and Lung Center, 200 Trenton Road, Browns Mills, NJ 08015. Telephone: (609) 893-6611, extension 352; FAX: (609) 893-0938. An Equal Opportunity Employer.

## ANNOUNCEMENTS

### CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S, 424 Beacon Street, Boston, MA 02115.

### CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND SCIENTISTS

A one-week intensive course sponsored by the Massachusetts Institute of Technology, June 6-10, 1994, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic Principles of Cardiovascular Physiology, Cardiovascular Medicine, Diagnostic and Therapeutic Technologies. Contact: Director of the MIT Summer Professional Program, Telephone: 617-253-2101.

## ANNOUNCEMENTS

**PUBLIC MEETING, COMMITTEE ON BIOLOGICAL EFFECTS OF IONIZING RADIATION (BEIR VI): HEALTH EFFECTS OF EXPOSURE TO RADON**—The National Research Council is reassessing the biological effects and risks to human health due to radon and its radioactive progeny. Scientists and the public are invited to comment on the cellular and molecular actions, dosimetry, and health risks of radon exposure at a public meeting at 10:00 a.m., Monday, April 4, 1994, at the National Academy of Sciences Building, 2101 Constitution Avenue, NW, Washington, DC. Please notify Dr. Evan B. Doupé by Telephone: (202-334-2232) or FAX: (202-334-1639) of your interest in attending this meeting.

## MARKETPLACE

### CUSTOM DNA SYNTHESIS

#### PURE & SIMPLE

Price **\$2<sup>19</sup>**  
as low as per base plus set up

- Superb Technical Support
- Impeccable Quality
- World's Fastest Service

### MIDLAND

THE UNDISPUTED #1  
CUSTOM DNA SYNTHESIS SERVICE  
THE MIDLAND CERTIFIED REAGENT COMPANY  
3112-A West Cuthbert Avenue  
Midland, Texas 79701  
Phone 1-800-247-8766 FAX 915-694-2387

Circle No. 4 on Readers' Service Card

### ABS Bioreagents™

Custom Receptor Binding,  
Enzyme, and RNA Preparations  
Fast, Cost-Effective Service  
Analytical Biological Services Inc.  
(800) 391-2391

Circle No. 29 on Readers' Service Card

### HUMAN ENDOTHELIAL CELLS VENOUS, ARTERIAL, and MICROVASCULAR SYSTEMS

True pools of >50 donors, frozen @ <6 CPD in vitro,  
>500,000 cells, complete CS growth medium system  
characterized and tested for cytokine-stimulated leukocyte  
adherence, negative for HIV-1 DNA by PCR

800-697-1211  
cell systems

Circle No. 26 on Readers' Service Card

### KEYSTONE Laboratories, Inc.

The Complete  
Oligonucleotide  
Company

#### OLIGONUCLEOTIDES

Volume orders of 200 - 500 total bases

\$2.50 per base

No set-up fee; shipped in 24hrs.

Tel. 1-800-788-4DNA • Fax 1-800-786-4DNA

Circle No. 6 on Readers' Service Card

## MARKETPLACE



### PEPTIDES

Synthesis and HPLC  
Call for quotes, 10 mg and more

### PEPTIDE TECHNOLOGIES

1-800-966-3384 FAX (301) 869-7308

Circle No. 21 on Readers' Service Card



ROCKLAND  
Immunochemicals for Research

### Antibodies to ENZYMES

◆ 1994 Catalog of Anti-Immunoglobulins  
Superior Quality at Affordable Prices  
610-369-1008 Fax 610-367-7825

Circle No. 25 on Readers' Service Card

Activated For Protein Modification

### PEGs

Shearwater Polymers, Inc.

(800) 457-1806  
(205) 533-4805 (fax)

Circle No. 10 on Readers' Service Card

### Quantitative Standards for Flow Cytometry

... determine MESF fluorescence intensity  
and ABC antibody binding capacity.

FCSC Flow Cytometry Standards Corporation  
P.O. Box 194344 San Juan, PR 00919  
Call: (800) 227-8143 FAX: (809) 758-3267

Circle No. 48 on Readers' Service Card



### ANTIBODIES

Conjugates  
Secondary  
Custom

Antibodies Inc.

Price  
below  
competitors.

Call  
1-800-824-8540  
Fax: (916) 758-6307

Circle No. 27 on Readers' Service Card

### Sterile Nylon Wool Columns

Ready to use for B- & T-cell enrichment

10 columns US\$ 270,- shipping incl.

WAK - CHEMIE  
MEDICAL GMBH  
Germany



Tel. +49 (61 72) 2 20 73  
Fax +49 (61 72) 2 03 17

Circle No. 39 on Readers' Service Card

### Express Peptides

5 mg in 5 days  
\$25 per residue

Research Genetics  
1-800-533-4363

Circle No. 5 on Readers' Service Card



# GENERELEASER

## PCR\* READY DNA IN 5 MINUTES

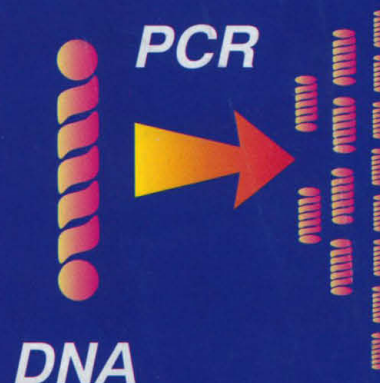
1993  
R&D  
100  
WINNER



**SAMPLE  
TYPES**

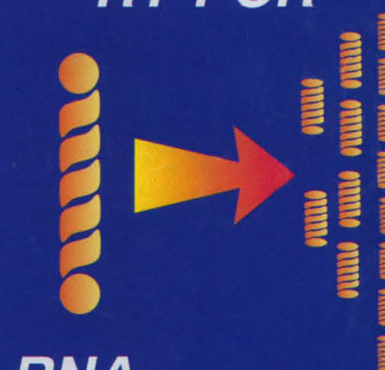


- \* FIVE MINUTE PROTOCOL
- \* MULTIPLE ASSAYS
- \* KITS NOW AVAILABLE



**DNA**

**RT-PCR**



**RNA**

IN ADDITION TO THE STOCK GENERELEASER REAGENT, KITS FOR DNA AND RNA PREPARATION FROM MOUSE TAILS, WHOLE TISSUES, YEASTS, PLANTS, AND PARAFFIN EMBEDDED TISSUES ARE AVAILABLE COMPLETE WITH PROTOCOLS, MICROWAVE RACK, DISPOSABLE PESTLES AND TUBES FOR 50 ASSAYS.

**CALL NOW FOR ONE OF THE MOST COST EFFECTIVE,  
INNOVATIVE SAMPLE PREPS AVAILABLE**

**BioVentures, Inc.**

Phone 800-235-8938 FAX 615-896-4837

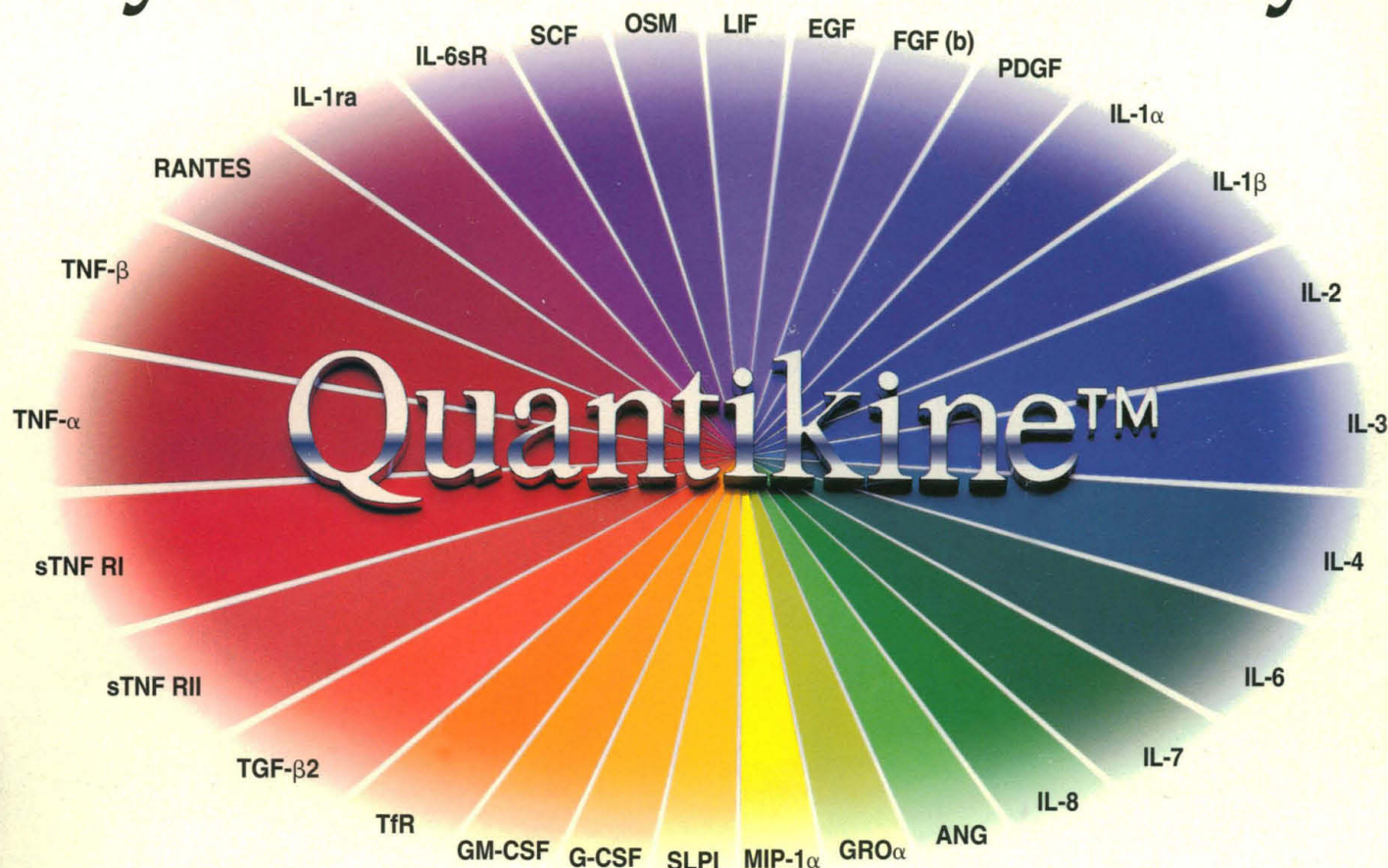
AUSTRALIA: Integrated Sciences Pty. Ltd. (02) 436-2611 AUSTRIA: Vienna Lab (1) 740-40-190 BELGIUM: Eurogentec (41) 66 01 50 CANADA: General Synthesis & Diagnostics (416) 978-8805 & Kara-Tech (604) 264-8844  
CHINA: Jingmei Biotech 364-273 & T.W.C. BioSearch International (852) 699-6208 CZECH REPUBLIC: BioVendor sro (49) 69-67721 27 FRANCE: ATGC Biotechnologie (1) 43 04 21 00 & Eurogentec (41) 66 01 50  
GERMANY: Angewandte Gentechnologie Systeme mbH (6221) 831023 & Eurogentec (41) 66 01 50 & Syring-Vertriebsgesellschaft mbH (69) 359086 or (6221) 161720 ISRAEL: Talran (8) 472563 ITALY: Polymed srl (55) 8071285  
JAPAN: Funakoshi (3) 5684-1622 KUWAIT: Boushahri Meditech 5729000 THE NETHERLANDS: Eurogentec (41) 66 01 50 NEW ZEALAND: Integrated Sciences Pty. Ltd. (02) 436-2611  
SOUTH AFRICA: Whitehead Scientific (21) 981-1560 SPAIN: Bio-Synthesis (1) 352-63-99 & C.E. Durviz sl (6) 347-6409 TAIWAN: Pro-Tech (2) 3810844 UNITED KINGDOM: Cambio 223-66500

\*PCR IS COVERED BY PATENTS OWNED BY HOFFMANN-LA ROCHE

Circle No. 8 on Readers' Service Card

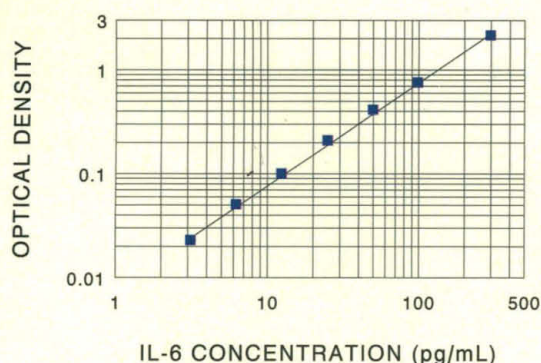


# Cytokine Immunoassays



## Sensitive...Precise...Accurate.

Standard curve for IL-6 in serum diluent using the 2 hour shaker option.



Cytokines exert their effects at extremely low concentrations in the presence of many other bioactive proteins. Quantikine immunoassays provide precise determination of cytokines in very complex biological samples.

- Sensitivity in the picogram range
- Tested for cross reactivity with all available cytokines
- Assay time - 2.0 - 4.5 hours
- Precoated 96 well strip plates
- Prediluted HRPO-conjugated second antibody
- Diluents for Serum/Plasma and Cell Culture Media
- Low inter-and intra-assay CV's

To obtain a catalog, detailed product information or to place an order:

**In North America Contact:**

**R&D Systems**  
614 McKinley Place N.E.  
Minneapolis, MN 55413  
Telephone: 800-343-7475  
Fax: (612) 379-6580

**Freephone:**

Belgium: 078 11 04 68  
Denmark: 80 01 85 92

**In Europe Contact:**

**R&D Systems Europe**  
4-10 The Quadrant, Barton Lane  
Abingdon, Oxon OX14 3YS  
Telephone: +44 (0235) 531074  
Fax: +44 (0235) 533420

France: 05 90 72 49  
Netherlands: 060 225 607

**In Japan Contact:**

**Funakoshi Co., Ltd.**  
9-7, Hongo 2-Chome  
Bunkyo-ku, Tokyo 113  
Telephone: +81 (03) 56841622  
Fax: +81 (03) 56841633

Norway: 800 11 033  
Sweden: 020 79 31 49

**R&D**  
**SYSTEMS**

**1-800-343-7475**