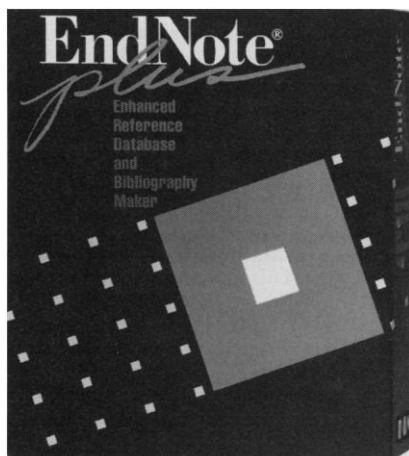


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putation Panos Y. Papalambros and Douglass J. Wilde. Cambridge University Press, New York, 1991. xxii, 416 pp., illus. \$59.50; paper, \$32.95. Reprint, 1988 ed.

**The Psychology of Emotions.** Carroll E. Izard. Plenum, New York, 1991. xx, 451 pp., illus. \$34.50. Emotions, Personality, and Psychotherapy.

**Radiation Effects on Polymers.** Roger L. Clough and Shalaby W. Shalaby, Eds. American Chemical Society, Washington, DC, 1991. xiv, 633 pp., illus. \$109.95. ACS Symposium Series, 475. From a symposium, Washington, DC, Aug. 1990.

**Rates of Soil Chemical Processes.** D. L. Sparks and D. L. Suarez, Eds. Soil Science Society of America, Madison, WI, 1991. xxviii, 302 pp., illus. Paper, \$36. SSSA Special Publication No. 27. From a symposium, Las Vegas, NV, Oct. 1989.

**Reaction Mechanisms of Inorganic and Organometallic Systems.** Robert B. Jordan. Oxford University Press, New York, 1991. x, 282 pp., illus. \$39.

**The Regulation of Hemoglobin Switching.** George Stamatoyannopoulos and Arthur W. Nienhuis, Eds. Johns Hopkins University Press, Baltimore, MD, 1991. xiv, 552 pp., illus. \$110. Johns Hopkins Series in Contemporary Medicine and Public Health. From a conference, Airlie, VA, Sept. 1990.

**Regulation of Hepatic Function.** Metabolic and Structural Interactions. Niels Grunnet and Bjorn Quistorff, Eds. Munksgaard, Copenhagen, 1991. (U.S. distributor, Mosby-Year Book, Chicago). 517 pp., illus. DKK550. Alfred Benzon Symposium no. 30. From a symposium, Copenhagen, June 1990.

**Relating Theory and Data.** Essays on Human Memory in Honor of Bennet B. Murdock. William E. Hockley and Stephan Lewandowsky, Eds. Erlbaum, Hillsdale, NJ, 1991. xiv, 560 pp., illus. \$89.95; paper, \$39.95. From a conference, Toronto, June 1990.

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**Superconducting Technology.** 10 Case Studies. K. Fosheim, Ed. World Scientific, Teaneck, NJ, 1991. viii, 240 pp., illus. \$58. From a symposium, Røros, Norway, Jan. 1991.

**Theories of Hypnosis.** Current Models and Perspectives. Steven Jay Lynn and Judith W. Rhue, Eds. Guilford, New York, 1991. xxii, 634 pp., illus. \$50. Guilford Clinical and Experimental Hypnosis Series.

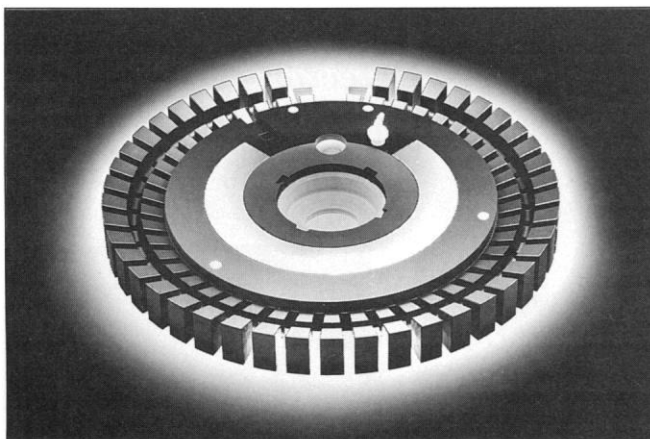
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**Trophoblast Invasion and Endometrial Receptivity.** Novel Aspects of the Cell Biology of Embryo Implantation. Hans-Werner Denker and John D. Aplin, Eds. Plenum, New York, 1991. xii, 462 pp., illus. \$115. Trophoblast Research, vol. 4. Based on a workshop, Heidelberg, Germany, 1986.

**Truncated and Censored Samples.** Theory and Applications. A. Clifford Cohen. Dekker, New York, 1991. xvi, 312 pp., illus. \$99.75. Statistics: Textbooks and Monographs, vol. 119.

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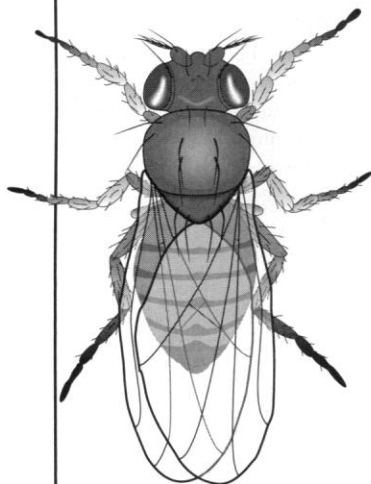
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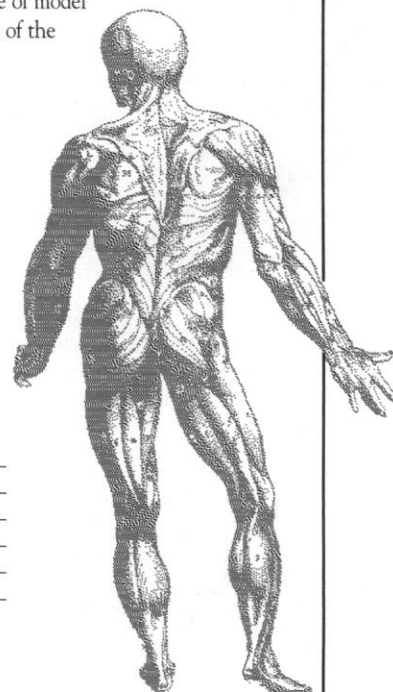
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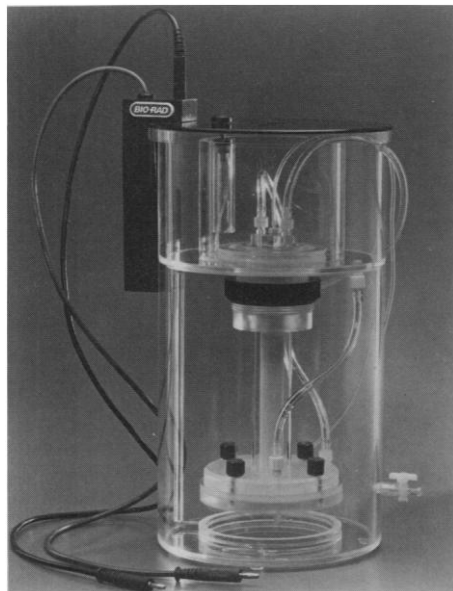
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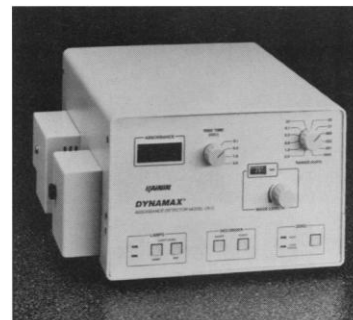
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### FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY TECHNION, HAIFA, ISRAEL

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level in biochemistry and molecular biology. Send curriculum vitae, description of research interests and three references to: Dr. Avram Hershko, Unit of Biochemistry, Faculty of Medicine, Technion-Israel Institute of Technology, P.O. Box 9649, Haifa 31096, Israel. FAX: 9724-535773.

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The University of California, Santa Cruz (UCSC), is seeking **ASSISTANT PROFESSOR** applicants in environmental toxicology with an emphasis on aquatic systems in biochemical toxicology, metabolic fate of toxicants, microbial remediation or ecotoxicology of natural systems. A Ph.D. or equivalent in chemistry, earth sciences, marine sciences, biology or environmental studies is required along with an outstanding research and teaching record and a proven record of extramural grant support. Salary: \$37,400 to \$40,000. Appointment effective fall 1992; appointment contingent upon availability of funds. Send curriculum vitae, statement of research/teaching interests and experience, reprints and arrange for three letters of evaluation to be submitted to: Chair, Environmental Toxicology Search Committee, c/o Biology Department, University of California, Santa Cruz, CA 95064 by 10 April 1992. *UCSC is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT PROFESSORS.** The Department of Physiology and Cell Biology invites applications for two assistant professor positions (tenure track) for 1 July 1992. Applicants must have 2 to 3 years of postdoctoral experience; ability to develop an independent research program; and an interest in teaching M.D. and/or Ph.D. students. Current faculty research includes: phagocytic and endothelial cell biology, tissue injury and repair, cellular signaling, extracellular matrix assembly and degradation, adhesive glycoproteins and cell function, lung vascular permeability, peripheral microvascular physiology as well as pathophysiology of shock, sepsis and intravascular coagulation. Submit curriculum vitae to: Dr. Thomas Saba, Department of Physiology and Cell Biology (A-134), Albany Medical College, Albany, NY 12208. *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS

The Center for Extracellular Matrix Biology at the Institute of Biosciences and Technology, Texas A&M University, located at the Texas Medical Center, Houston, Texas, invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member and have research interests in the area of extracellular matrix biology. Preference will be given to candidates with training in biochemistry and/or cell biology and experience in molecular biology.

Applicants should send a letter outlining their research interests, their curriculum vitae and three letters of reference to: **Dr. Magnus Hook, c/o Bill Alley, Institute of Biosciences and Technology, 2121 Holcombe Boulevard, Houston, TX 77030.**

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**MAIZE GENETICIST (ASSISTANT PROFESSOR).** The Plant Science Unit of the College of Agriculture, University of Missouri, is seeking a maize geneticist for a 12-month tenure-track appointment at the assistant professor level that will carry 80% research and 20% teaching responsibilities. The successful candidate will be expected to use genetic approaches to study important problems in plant biology including but not restricted to developmental, physiological and/or biochemical processes and to interact with established scientists encompassing the areas of molecular biology, cytogenetics, biochemistry, physiology and plant breeding. Duties will include graduate student advisement and teaching a course in an area of expertise. A Ph.D. in plant genetics or a closely related field is required. Postdoctoral experience in genetics desired. Salary commensurate with qualifications and experience. Letter of application, complete curriculum vitae and three letters of reference should be sent to: **Dr. Anne L. McKendry, 210 Waters Hall, University of Missouri, Columbia, MO 65211. Telephone: 314-882-7708.** Closing date is 15 April 1992 or until position is filled.

### ASSISTANT PROFESSOR DEPARTMENT OF PHYSIOLOGY EAST TENNESSEE STATE UNIVERSITY JAMES H. QUILLEN COLLEGE OF MEDICINE

Tenure-track position at the assistant professor level is to begin 1 June 1992. Applicant must have a doctoral degree with extensive training in physiology and have two or more years of postdoctoral experience. Potential to develop and sustain a fundable, independent research program will be an important selection criteria. Area of expertise is open, but currently the department has six faculty members whose interests represent a wide range of cellular and systems-oriented research in the physiological sciences. There are opportunities for collaboration throughout the department and college with research groups interested in cell biology of the vascular wall, neuroscience, membrane transport, electrophysiology, cardiovascular control, and cell and molecular biology. East Tennessee State University provides a growing research community, ample start-up funds, modest teaching loads, and a beautiful physical location. Candidates should submit curriculum vitae, names of three references, and a brief research prospectus to: **Dr. William L. Joyner, Professor and Chairman, Department of Physiology, P.O. 19,780A, East Tennessee State University, Johnson City, TN 37614.**

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**Robert H. Ossoff, D.M.D., M.D.**  
Chairman, Department of Otolaryngology  
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## POSITIONS OPEN

**MOLECULAR BIOLOGIST.** The Center for Pharmaceutical Biotechnology invites applications for a position at the level of **ASSISTANT PROFESSOR** in molecular biology, with application to pharmaceutical design or development, available September 1992. Ph.D. and postdoctoral experience required. Preference will be given to applicants who have demonstrated expertise in such areas as protein engineering or genetic engineering. Responsibilities include developing a strong, externally funded research program, and teaching in the graduate and professional programs. The developing Center for Pharmaceutical Biotechnology provides an environment that fosters both collaboration and cooperation, bringing together campus researchers from the full range of biotechnology-related disciplines. In addition to appointment within the center, the successful candidate will have a tenure-track appointment within one of the College of Pharmacy basic science departments. Curriculum vitae, description of research interests, and three letters of reference should be forwarded by 15 April 1992 to: **Dr. Michael E. Johnson, Interim Director, Center for Pharmaceutical Biotechnology, Office of the Dean (m/c 874), University of Illinois at Chicago, P.O. Box 6998, Chicago, IL 60680-6998.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

### UNIVERSITY OF WISCONSIN-MADISON PRIMATE RESEARCH CENTER AND THE DEPARTMENT OF PATHOLOGY ASSISTANT PROFESSOR

We require an immunogeneticist with an outstanding research record to study the involvement of MHC Class I and II in defense against viral infection in primates. A knowledge of serology and molecular analysis of human MHC, and the development of molecular approaches to tissue typing, is necessary. Experience with both new and old world primate species (including human) is essential. Applicants should have a Ph.D. and at least 5 years of subsequent experience, with proven publication, funding, and communications records, together with an ability to teach.

Salary will depend on experience. Applicants please send a curriculum vitae and the names of three referees to: **Dr. John Hearn, Director, Wisconsin Regional Primate Research Center, 1223 Capitol Court, Madison, WI 53715-1299,** before 31 March 1992.

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

### ASSISTANT AND ASSOCIATE PROFESSORS EMORY UNIVERSITY

The Department of Pharmacology has up to six new tenure-track positions available, beginning September 1992. We seek energetic individuals with strong evidence of sustained creativity and a temperament that facilitates interaction with other faculty. Candidates should have the Ph.D., M.D. or comparable degree and postdoctoral research experience. All areas of modern research on pharmacological problems will be considered. At least four positions will be filled by candidates with research interests that involve molecular and cellular approaches, with emphasis on the study of drug or neurotransmitter receptors, ion channels, or signal transduction proteins. Appointees will participate in the training of medical and graduate students. Applicants should send curriculum vitae, representative reprints, a summary of current research and future plans, and names of at least three references to: **Raymond Dingleline, Chairman-designated, Department of Pharmacology, Emory University School of Medicine, Atlanta, GA 30322.** *We encourage applications from women and minority groups. Emory University is an Equal Opportunity/Affirmative Action Employer.*

**MOLECULAR BIOLOGY:** teaching and research position at **ASSISTANT OR ASSOCIATE PROFESSOR** level with expertise in cellular regulation, including but not limited to eukaryotic genetics, developmental biology, and cellular physiology. Available on or after 4 January 1993. Candidate must have Ph.D. or equivalent and preferably postdoctoral experience. Request application packet from **Dr. James Farmer, 571 WIDB, Department of Zoology, Brigham Young University, Provo, UT 84602. Telephone: 801-378-2153, FAX: 801-378-7499; farmerj@yuvax.byu.edu, farmerj@byuvax.bitnet.** *Equal Opportunity Employer.*

## POSITIONS OPEN

**FACULTY POSITIONS,** bone and cartilage research. The Section of Musculoskeletal Biology, Department of Biomedical Engineering at The Cleveland Clinic Foundation invites applicants for three full-time faculty **ASSISTANT/ASSOCIATE PROFESSOR** level positions in a progressive and developing multidisciplinary group focused in connective tissue research and tissue engineering. Successful applicants at the junior level should expect to pursue independent research as well as for collaborations within the section and department. Senior level applicants should have track record of original research. Expertise in cell and molecular biology techniques is expected. Ongoing program areas include: Osteoarthritis and Cell Matrix Interactions (C. A. McDermott), Connective Tissue Vascularization (R. R. Miller), and Stem Cell Isolation and Transplantation (G. F. Muschler). Start-up funding is available. The Cleveland Clinic Foundation is academically affiliated with Ohio State University. Candidates must have a Ph.D. or equivalent degree and qualify for joint appointment. Please forward comprehensive curriculum vitae, brief statement of professional goals, and the names of three references to: **George F. Muschler, Musculoskeletal Biology, Department of Biomedical Engineering and Applied Therapeutics (Wb3), The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195-5254.** *The Cleveland Clinic is an Equal Opportunity/Affirmative Action Employer.*

### BIOMEDICAL ENGINEERING FACULTY POSITIONS

Boston University College of Engineering, Department of Biomedical Engineering, anticipates an opening for two tenure-track faculty positions at the **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** level effective September 1992. **Cardiopulmonary mechanics:** Seeking outstanding candidates with research interest in cardiopulmonary mechanics to join our existing group in respiratory mechanics. This person will be expected to develop and teach courses in the bioengineering aspects of the cardiovascular system and to conduct an active research program. Requires Ph.D. in engineering or physiology with undergraduate training in engineering. **Biomedical engineering faculty:** Seeking outstanding candidates with research interests in computational vision, fields/tissue interactions, human/machine interfacing, or biomechanics (electromyography/functional electrical stimulation) to join existing groups. Requires Ph.D. in engineering. Eligible candidates should submit curriculum vitae with names and addresses of at least three references to: **Faculty Search Committee, Department of Biomedical Engineering, Boston University, College of Engineering, 44 Cummings Street, Boston, MA 02215.** Applications will be accepted through June 1992 or until positions are filled. *An Equal Opportunity/Affirmative Action Employer.*

### 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, ASSOCIATE AND FULL PROFESSOR** for the Molecular Oncology Program of the newly created 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 1 May 1992 to:

**Search Committee for the  
Molecular Oncology Program  
Boyer Center for Molecular Medicine  
Yale University School of Medicine  
295 Congress Avenue, 109 BCMH  
P.O. Box 9812  
New Haven, CT 06536-0812**

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



# GRANTS FOR INTERNATIONAL JOINT RESEARCH IN THE AREAS OF MATERIALS, ENERGY 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 energy area and the global environment area will be provided with grants from FY 1992.

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 1992'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) Basic research concerning the investigation and elucidation of materials. 2) Basic research concerning the practical use of materials.	about 30,000,000 yen in FY 1992	5 themes	NEDO (Note a.)
Energy	Practical research on power generation technologies using oil-alternative energy, on load leveling technologies and on global environment conservation related to those technologies.	about 30,000,000 yen in FY 1992	3 themes	
Global Environment	1) Basic research on conservation and improvement of the global environment.	about 24,000,000 yen in FY 1992	2 themes	RITE (Note b.)
	2) Practical research 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 1992	1 theme	

{Recipients of applications}

Note a. Materials and energy areas

International Joint Research Division, Industrial Technology Department. New Energy and Industrial Technology Development Organization (NEDO). Address: 21F, Sunshine Bldg. 3-1-1 Higashi-Ikebukuro, Toshima-ku, Tokyo, 170 Japan. Phone No.: 03-3987-9357. Telefax No.: 03-3981-1536

Note b. Global environment area

Research Proposals Reception Section. Research Planning Department. Research Institute of Innovative Technology for the Earth (RITE). Address: 4F, Shin Kyoto Center Bldg., Karasumanishi-iru, Shiokouji-dori, Shimogyo-ku, Kyoto 800 Japan. Phone No.: 075-361-3611. Telefax No.: 075-361-5607.

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.

The application period is from March 5, 1992 to June 5, 1992. No application will be accepted later than June 5th.

**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.

## Research Scientist

Searle is a worldwide leader in the research, development and manufacture of quality pharmaceuticals. As such, we seek a Research Scientist for our Neurological Disease Research group.

The candidate we select will determine biochemical characterization of neuronal death in vitro and in vivo while identifying and implementing the development of new compounds. Additional responsibilities include screening and confirming the biochemical action of specific compounds, supervising laboratory personnel, and collaborating with behavioral pharmacologists and electrophysiologists on new drug development issues.

Qualified applicants will have a Ph.D. in Biochemistry, Pharmacology or Neuroscience along with 3-5 years of post-doctoral experience. Previous supervisory experience is also required.

For consideration, please send your resume, in confidence, to:  
**Searle, Human Resources, Dept. PB30, 4901 Searle Parkway, Skokie, IL 60077.** An equal opportunity employer M/F/D.



## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR IMMUNOLOGY

The Department of Microbiology and Immunology at West Virginia University School of Medicine is currently recruiting a tenure-track faculty member in the area of immunology with demonstrated research skills in molecular biology. The successful candidate will be expected to develop independent, as well as collaborative, research in immunology. Research interests that complement the current faculty interests on antigen presentation, developmental immunology or immunotoxicology are preferred. Applicants must have a Ph.D. degree, several years of postdoctoral training, and significant research productivity in the application of molecular biological techniques to current immunological questions. Teaching responsibilities of the department include professional and allied health students as well as graduate students. Appointment at the associate professor level requires demonstrated record of extramural research funding. Salary is competitive and start-up funds are available. Deadline for application is 31 March 1992. Submit curriculum vitae, summary of current and future research, and names of three references to: **John B. Barnett, Ph.D., Chair, Department of Microbiology and Immunology, West Virginia University School of Medicine, 2095 Health Sciences North, Morgantown, WV 26506.** Affirmative Action/Equal Opportunity Employer.

### WEST VIRGINIA SCHOOL OF OSTEOPATHIC MEDICINE (WVSOM) MICROBIOLOGY FACULTY POSITIONS AVAILABLE

Two tenure-track positions at ASSISTANT OR ASSOCIATE PROFESSOR level. One position requires a Ph.D. in virology or microbiology with virology specialty. The other position requires a Ph.D. in immunology or microbiology with immunology specialty.

Prior teaching experience required. Teaching responsibilities are team-taught general microbiology plus specialty areas to medical students. Some research opportunities available.

Applicants should submit a letter describing teaching and research experience and interests, curriculum vitae, names and addresses of three references to: **Chairperson, Microbiology Search Committee, Personnel Office, WVSOM, 400 North Lee Street, Lewisburg, WV 24901.** Applications will be accepted until the position is filled. An Equal Opportunity Employer.

### MOLECULAR BIOLOGY PROGRAM UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

**FULL PROFESSOR, ASSOCIATE OR ASSISTANT PROFESSOR.** With the assistance of funding from the Lucille P. Markey Charitable Trust, two faculty positions will become available 1 July 1992. One area of interest is in the general area of macromolecular structure, including molecular electron microscopy. We are also interested in candidates whose work centers around protein/peptide chemistry, mechanistic enzymology and molecular approaches to transcription, recombination or other areas of protein-nucleic acid interaction. Other favored areas of research include studies of oncogenes, antioncogenes, molecular virology and translational control. The successful candidates will be active participants in the Molecular Biology Program and the Department of Biochemistry, Biophysics and Genetics and must have molecular research interests and teaching expertise suitable for a Biochemistry Department. The program has an active graduate program and is fully equipped with most facilities needed for modern molecular research. The search will continue until a suitable candidate is found, but only those applications received before 6 May 1992 can be guaranteed full consideration. Please send applications including curriculum vitae, names of four references and a description of research interests to either the **Full Professor Search Committee or Associate Professor Search Committee, Molecular Biology Program B-121, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.** The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.



## Computational Chemist

The BOC Group, an innovative world leader in Health Care products, has a challenging career opportunity at our state-of-the-art Technical Center located in Murray Hill, New Jersey.

The successful candidate will join our computer-assisted drug design group working in support of medicinal, peptide and protein chemistry projects. The position

requires a Ph.D. in Chemistry or Biophysics with 2+ years of experience in the application of molecular modeling techniques for drug design, and good computer skills. Familiarity with molecular modeling of peptides and proteins would be a plus.

BOC offers a challenging and stimulating scientific research career environment with the opportunity to interact with scientists from many disciplines. We provide an excellent compensation and benefits package. For prompt, confidential consideration, please forward your resume with salary requirements to: **Manager Human Resources Box AG, The BOC Group Technical Center, 100 Mountain Avenue, Murray Hill, New Jersey 07974.**

**THE BOC GROUP**  
**Technical Center**

We are  
an equal  
opportunity  
employer M/F/H/V

## POSITIONS OPEN

**FACULTY POSITIONS: BIOCHEMISTRY AND MOLECULAR BIOLOGY.** The Department of Biochemistry and Molecular Biology is seeking applicants for tenure-track faculty position, preferably at the **ASSOCIATE** or **FULL PROFESSOR** level. Outstanding individuals with active, funded research programs and teaching experience are being sought. Applicant should send curriculum vitae, list of publications, description of research and names of three references to: **Chairman, Search Committee, Department of Biochemistry and Molecular Biology, Texas College of Osteopathic Medicine (TCOM), 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2690.** *TCOM is an Affirmative Action/Equal Opportunity Employer and Educator.*

**RESEARCH ASSOCIATE/ASSISTANT PROFESSOR.** The Department of Surgery of the University of Minnesota invites applications for two academic professional positions at the rank of research associate/assistant professor (nontenure track). Candidates should have a Ph.D. or M.D. with experience in molecular biology or protein chemistry. The successful applicants will be expected to establish independent research programs and to collaborate with a multidisciplinary group in studying wound healing, regeneration and tumorigenesis. Preference will be given to individuals with interest in the regulation of cell growth, differentiation and transformation, the biochemistry and molecular biology of bioactive factors and matrix molecules, and mechanisms of gene regulation. Interested individuals should submit curriculum vitae, a brief statement of research interests and future plans and the names of three references by 15 April 1992 to:

Rosalie Cihlar  
Executive Secretary  
Department of Surgery  
University of Minnesota  
Box 195 UMHC  
Minneapolis, MN 55455

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

### ASSISTANT LEADER-WILDLIFE WASHINGTON COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT

The U.S. Fish and Wildlife Service (FWS) and the University of Washington invite applications for the position of Assistant Unit Leader-Wildlife (GS-486-11/12) in the Washington Cooperative Fish and Wildlife Research Unit within the School of Fisheries. Candidates must have a Ph.D. in wildlife science, zoology, biology or closely related field, and meet the requirements for wildlife biologist as stated in the OPM X-118 Handbook. The successful candidate will be employed by the FWS, will hold a joint faculty appointment between the School of Fisheries and the College of Forest Resources at the university, and will be expected to plan, conduct, and direct research related to wildlife biology and management with emphasis on aquatic wildlife (freshwater, estuarine or marine), their habitats, behavior, and population dynamics. In addition, the successful candidate will be expected to teach one graduate level course per year and must meet the requirements for a faculty appointment at the university. To apply, send a completed SF-171 and OPM Form 1170 (list of college courses) or college transcripts to: Dot Easley, U.S. Fish and Wildlife Service, Region 8 Personnel, Mail Stop 725, ARLSQ, 18th and C Streets, N.W., Washington, DC 20240. Applications must be postmarked no later than 6 April 1992. A copy of the application should be sent to: Dr. Marsha Landolt, Director, School of Fisheries, WH-10, University of Washington, Seattle, WA 98195. *The U.S. Fish and Wildlife Service and the University of Washington are Affirmative Action/Equal Opportunity Employers. Women and minorities are encouraged to apply.*

## SCIENCE

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6 MARCH 1992

# Inter American University of Puerto Rico

## POSITIONS IN HIGHER EDUCATION PUERTO RICO

Inter-American University of Puerto Rico,  
a private non-profit institution,  
invites applications for the following positions:

\*One (1) Full Time Visiting Professor of Education. The candidate must be able to lecture in Spanish, possess a Doctoral Degree in Education with a major in Policy, Planning and Analysis, and have 3 years of teaching experience at the college level. Teaching load is 15 credit/hours. Starting salary is \$34,200/year.

\*One (1) Full Time Instructor of Computer Science. The candidate must be able to lecture in Spanish, possess a Master's Degree in Industrial Technology with a major in Computer Sciences, and have 3 years of teaching experience at the college level. Teaching load is 15 credit/hours. Starting salary is \$21,480/year.

**DEADLINE: MARCH 16, 1992**

**Send résumé and academic credentials to:**

**Inter-American University of Puerto Rico  
Central Administration  
Human Resources Office  
P.O. Box 363255  
San Juan, Puerto Rico 00936-3255**

**AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER**



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**INTER**AMERICANA  
DE PUERTO RICO



## POSITIONS OPEN

### PROFESSOR AND CHAIR DEPARTMENT OF ANATOMY AND CELL BIOLOGY UNIVERSITY OF ALBERTA

Applications are invited for the position of Professor and Chair in the Department of Anatomy and Cell Biology of the Faculty of Medicine at the University of Alberta, the largest university in western Canada. We seek an individual with proven administrative experience, internationally recognized for achievement in cell biology or cellular neurobiology, and strongly committed to the education of medical and graduate students. The Chair will have an opportunity to recruit new faculty into a research-oriented department with both the mandate and the means for long-term growth. The current level of external funding approaches \$1.6 million annually. Outstanding research facilities are available; the department occupies 19,600 square feet of research space, including 5,500 square feet of newly renovated, laboratory space. Exceptional research funding opportunities are available from the Medical Research Council of Canada and the Alberta Heritage Foundation for Medical Research.

This appointment will be at the rank of **FULL PROFESSOR** with salary commensurate with qualifications and experience. *The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities and women.* Applicants should reply by 30 April 1992, enclosing curriculum vitae and the names of three referees to:

**Douglas R. Wilson, M.D.**  
Dean, Faculty of Medicine  
University of Alberta

27200 Mackenzie Health Sciences Centre  
Edmonton, Alberta T6G 2R7, Canada

### ASSOCIATE DIRECTOR OF CYTOGENETICS LABORATORY

We are seeking a Board-certified/Board-eligible (A.B.M.G.) cytogeneticist to serve as associate director and to share the clinical service load with the director of a full-service cytogenetics laboratory which handles approximately 2000 cases per year. A tenure-track faculty appointment is available within the Department of Pediatrics for qualified applicants. Experience/training in molecular techniques is required. Independent research in any area of cytogenetics is strongly encouraged. Please send a letter of intent, curriculum vitae, and the names, addresses and telephone numbers of three references to: **Kathleen W. Rao, Ph.D., Cytogenetics Laboratory, Department of Pediatrics, CB #7220, University of North Carolina (UNC) at Chapel Hill, Chapel Hill, NC 27599. UNC is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to identify themselves voluntarily.**

### DIRECTOR RETROVIRAL RESEARCH LABORATORY

Faculty position (**ASSOCIATE RESEARCHER OR ASSOCIATE PROFESSOR**), full-time, federal funds, Research Centers in Minority Institutions Program, Pacific Biomedical Research Center, University of Hawaii at Manoa, beginning June 1992. Incumbent will establish and direct a research and diagnostic laboratory at Leahi Hospital as part of a multidisciplinary retroviral research program studying patients with HIV infection. Opportunity to develop personal research interests in basic or clinical aspects of HIV in collaboration with Hawaii AIDS Clinical Trials Unit. Medically qualified candidates will be expected to participate in clinical care-related medical teaching. Applicants must have a Ph.D. in a biological science with a minimum of 4 years of experience at the assistant level including 2 years of experience with HIV, or a M.D. with certification by the American Board of Infectious Diseases and four additional years of medical experience including 2 years of laboratory experience with HIV. Knowledge and experience required in cell culture, PCR, ELISA and blotting techniques related to HIV. Previous AIDS Clinical Trials Groups experience is desirable. Women and minority candidates are urged to apply. Salary based on qualifications and experience in accordance with university scales. Submit curriculum vitae and the names of three references by 3 April 1992 to: **Margo Heath-Chiozzi, M.D., Hawaii AIDS Research Consortium, Leahi Hospital, 3675 Kilauea Avenue, Honolulu, HI 96816; telephone: 808-737-2751. The University of Hawaii is an Equal Opportunity/Affirmative Action Institution.**

## POSITIONS OPEN

### CHAIRMAN—DEPARTMENT OF BIOLOGY

Applications or nominations are invited for the position of Professor and Chair of the Biology Department at George Mason University, the position to commence in fall 1992 or spring 1993. The department is seeking a dynamic leader with proven administrative abilities, a commitment to undergraduate and graduate education, and a history of recognized funded research. Candidates in all areas of biology are encouraged to apply. The chair will lead a department of 30 full-time faculty with a broad range of research interests. The department offers undergraduate degrees in biology and medical technology, an M.S. degree in biology, and M.S. and Ph.D. degrees in environmental science/public policy.

George Mason is the state university for northern Virginia and is located in the metropolitan Washington, D.C., area. Approximately 20,000 students are enrolled. Candidates should send a letter of interest and curriculum vitae, and request that three letters of reference be sent to: **Chair Search Committee, Biology Department, George Mason University, 4400 University Drive, Fairfax, VA 22030-4444.** The committee will begin reviewing applications starting 15 March 1992. *George Mason University is an Equal Employment Opportunity/Affirmative Action Institution.*

### DEAN OF THE COLLEGE CENTENARY COLLEGE OF LOUISIANA

Centenary College, an independent liberal arts college, invites applications and nominations for the position of academic dean. Candidates should possess a distinguished record of teaching and scholarship and high academic credentials, ideally a Ph.D.

The position is available 1 June 1992. Screening of applicants will continue until the position is filled. Candidates should submit a letter of application, curriculum vitae, and three current letters of recommendation to: **Professor Lee Morgan, Chair, Dean Search Committee, Centenary College of Louisiana, P.O. Box 41188, Shreveport, LA 71134-1188. Equal Opportunity Employer.**

**DIRECTOR, G.I. RESEARCH.** For the Division of Gastroenterology and Nutrition at Winthrop-University Hospital in Mineola, New York. Requires a Ph.D. in physiology/pharmacology with at least 2 years of postdoctoral experience. Eligibility for academic rank of assistant professor of medicine at State University of New York at Stony Brook is necessary. Focus is on motility of the intestine with emphasis on inflammatory diarrheal disorders. Research activities supported by two fully equipped laboratories with equipment to perform in vivo and in vitro muscle physiology/electrophysiology. Using Chambers for study of secretion, full-time technical staff and an excellent hospital budget. Winthrop-University Hospital is a major teaching affiliate of the School of Medicine, State University of New York at Stony Brook. Ideally located on Long Island, only 30 minutes from Manhattan. Please send curriculum vitae and names of three references to: **Robert Burakoff, M.D., Chief, Division of Gastroenterology and Nutrition, Winthrop-University Hospital, 222 Station, Plaza North, Suite 429, Mineola, LI, NY 11501. Equal Opportunity Employer M/F/H/V.**

### DATA MANAGER—ECOLOGIST

The Harvard Forest, a Long Term Ecological Research (LTER) site located in central Massachusetts, is seeking a Ph.D.-level ecologist to serve as data manager. Individual will design and maintain computer databases for scientific data collected by the LTER and related projects, and assist scientists in problems of data management and data analysis. The full-time position will provide opportunity for one-third time on independent ecological research. Strong experience in database management systems, statistical analysis, and ecological research; and strong interpersonal and organizational skills desirable. Interested individuals should send application letter, curriculum vitae, relevant reprints and three letters of recommendation by 31 March 1992 to: **Dr. David R. Foster, Harvard Forest, Harvard University, P.O. Box 68, Petersham, MA 01366-0068.**

*Harvard University is an Equal Opportunity Employer and applications from women and minorities are strongly encouraged.*

## POSITIONS OPEN

### CYANAMID ITALIA S.P.A. TOXICOLOGY DEPARTMENT HEAD

We are currently seeking a person to supervise the conduct of toxicology studies on human pharmaceutical agents. This individual would be responsible for the overall management of studies in compliance with GLP and other applicable regulations. Primary responsibilities include the supervision of toxicology team leaders, resource management, review of data records. Qualified individuals will possess a Ph.D., D.V.M., M.D. or equivalent, at least 10 years of experience in GLP animal facility.

The individual chosen could occupy the position of "Dirigente" according to the Italian National Collective Agreement for "Dirigenti Industria." Contact: **Cyanamid Italia S.p.A., Direzione Del Personale, Casella Postale A, 95030 Piano D'Arce (Catania), Italy.**

### IVF EMBRYOLOGIST/ LABORATORY DIRECTOR

The Division of Reproductive Endocrinology at Hurley Medical Center in Flint, Michigan, is seeking an embryologist/andrologist to direct an established and successful IVF laboratory. State-of-the-art facilities include micromanipulator. Previous experience in tissue culture, embryology, IVF, andrology and cryobiology is required. Competitive salary, dependent upon experience, and generous benefits to qualified candidates. Academic appointment and research opportunity available. Please send curriculum vitae to:

**Mostafa Abuzeid, M.D.**  
Director of Reproductive Endocrinology  
Associate Professor of Obstetrics/Gynecology  
Michigan State University  
College of Human Medicine  
Two Hurley Plaza, Suite 205  
Flint, MI 48503

### SENIOR PROGRAM OFFICER ASSOCIATESHIP PROGRAMS

The Office of Scientific and Engineering Personnel of the National Research Council (NRC) is seeking a senior program officer experienced in research; directing doctoral dissertations; and able to interact with senior research staff, research center directors, and postdoctoral researchers. Requires a Ph.D. or equivalent preferably in the life or biomedical sciences; senior faculty rank or equivalent; and demonstrated ability for large program administration including program analysis, personnel management, database management, and reporting. The Associateship Programs Office administers a postdoctoral fellowship program for more than 30 federal agencies with laboratories in approximately 120 geographical sites throughout the United States. Programs encompass earth and atmospheric sciences, chemistry, physics, engineering, mathematics, space sciences, and life sciences. Participating agencies include: NASA, NIH, NRL, AD-AMHA, NIST, EPA and the DOD. Over 800 postdoctoral and senior researchers participate each year with about one-third in biomedical-related areas. Six program administrators oversee selection and placement of these researchers and examine laboratory environments through staff visits and site visits. Please send résumé in confidence to: **NRC/Associateship Programs (AES), GR 442, 2101 Constitution Avenue, N.W., Washington, DC 20418. Equal Opportunity Employer. Nonsmoking work environment.**

### TWO FACULTY POSITIONS

One position available for a **BIOCHEMIST** to teach medical biochemistry and one position available for a **PHYSIOLOGIST** to teach medical physiology and work independently and/or collaboratively with other research/teaching faculty. Primary responsibilities: not more than 25% of time teaching and at least 75% of time for research. Salary and academic rank open and commensurate with training, teaching experience and grant track record. Please send curriculum vitae and publications list detailing teaching experience, research interests, past, present and pending grant support information and the names of three references to: **Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, NY 11568. Affirmative Action/Equal Opportunity Employer.**

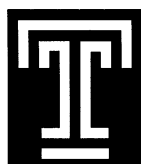
# Temple University School of Medicine

THE FELS INSTITUTE FOR CANCER RESEARCH AND MOLECULAR BIOLOGY AND THE DEPARTMENT OF BIOCHEMISTRY of the TEMPLE UNIVERSITY SCHOOL OF MEDICINE invite applications for tenure track Assistant Professor, Associate Professor or Professor level positions in the research areas described below. Applications are also invited from established investigators for positions as Program Directors who will recruit faculty members and develop the following research programs:

- ▶ **Molecular Genetics** - Emphasis on the role of oncogenes and growth suppressor genes in normal cell growth and differentiation.
- ▶ **Virology** - Focus on the role of viruses in the genesis of cancer, AIDS and other human disease.
- ▶ **Cell Biology and Immunology** - Mechanisms associated with immune function and the role of growth factors and cytokines in the growth and differentiation of hematopoietic cells. Studies with special animal model systems such as SCID mouse model systems will be undertaken.
- ▶ **Developmental Biology** - Use transgene and gene knockout techniques to study the mechanisms of action of developmentally important genes including oncogenes. Special emphasis will be in developmental neurobiology.
- ▶ **Structural Biology** - Structure of proteins important in biomedicine using physio-chemical techniques such as NMR spectroscopy, X-ray crystallography and molecular modeling.
- ▶ **Gene Therapy** - Development of viral vectors to be used in gene therapy. In close collaboration with the clinical oncology and bone marrow transplantation groups, begin a gene therapy program for the treatment of cancer and AIDS.

The Fels Institute is supported by a National Cancer Institute core grant and is located on the Health Sciences campus of Temple University. Forty thousand square feet of modern and well equipped laboratory space is available for newly appointed faculty. Excellent shared facilities include oligonucleotide and peptide synthesis, hybridoma, flow cytometry, electron microscopy and transgenic mouse laboratories. The Fels Institute participates in the graduate training programs of Temple Medical School. Start-up funds will be made available for newly appointed investigators. Interested candidates should send their curriculum vitae and three references to **E. Premkumar Reddy, Ph.D., Director, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, Medical Research Building, 3400 North Broad Street, Philadelphia, PA 19140.**

TEMPLE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER AND STRONGLY ENCOURAGES APPLICATIONS FROM WOMEN AND MINORITIES.



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# IGEN, INC.

IGEN, Inc., a dynamic biopharmaceutical company with an established, rapidly growing catalytic antibody program, has immediate opportunities for scientists at all academic and experience levels.

If chosen to join our exciting and innovative research program, you will be involved in the creation and implementation of Abzymes™ for medical therapeutic use. To qualify, you should have good communication skills, be highly motivated, and be able to work as part of a multidisciplinary team.

## Organic Chemistry

- Responsible for synthesis of hapten compounds and enzymatic substrates.
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## Hybridoma/Immunology

- Ph.D. degree plus experience required in the characterization of MAbs against cell surface markers and their use to target tumor cells *in vitro* and *in vivo*.
- Experience in the generation and immunogenetic analysis of immune responses to diverse antigens and/or haptens desirable.
- Research associates with experience in hybridoma methodology, HPLC, and antibody purification/fragmentation.

## Enzymology

- Ph.D. and M.S. degree plus experience in enzyme kinetics, enzyme assay design. HPLC/FPLC, and protein isolation required.
- Experience in enzyme mechanistic elucidation and/or monoclonal antibodies helpful.

## Molecular Biology

- Ph.D. degree and experience in molecular cloning, sequencing and PCR required.
- Experience in immunoassay systems, microbial genetics and phage cloning desirable. Protein purification experience helpful.

## Pharmacology

- Responsibilities to include evaluation of cyto/systemic toxicity and anti-tumor activity of novel pharmaceuticals.
- M.S./Ph.D. degree as well as experience required in human tumor models both *in vitro* and using nude/SCID mice.

## Project Management

- Responsible for coordinating antibody research, product development and clinical testing.
- Scientific background in the pharmaceutical industry and some experience in drug development required. Experience in project management or regulatory affairs preferable.

We offer a competitive salary and comprehensive benefits package. For immediate consideration, please send your resume and salary history to IGEN, Inc., Attention: Human Resources, 1530 East Jefferson Street, Rockville, Maryland 20852.

Equal Opportunity Employer

## POSITIONS OPEN

**THE UNIVERSITY OF CHICAGO** is seeking **JUNIOR AND SENIOR FACULTY** for its cardiology program. Opportunities are broadly available in clinical cardiology, in non-invasive imaging, electrophysiology, and hypertension. Opportunities are available in clinical research and basic investigation in device trials, applications of newer technologies, clinical pharmacology and molecular biological approaches to cardiovascular disease. Teaching of students, housestaff and fellows is an integral part of all positions. Send curriculum vitae and the names of three referees to: **The University of Chicago, Human Resources Management, 956 East 58th Street, c/o CFAC, Chicago, IL 60637. An Affirmative Action/Equal Opportunity Employer.**

**FACULTY POSITIONS.** The Jonsson Comprehensive Cancer Center at University of California at Los Angeles (UCLA) seeks candidates for junior-level tenure-track or mid-level tenure positions in the Jonsson Comprehensive Cancer Center. Candidates should hold a Ph.D., an M.D., or an M.D./Ph.D. degree and possess expertise and an active laboratory program in one of the following four areas of basic research: (1) signal transduction in eukaryotic cells, (2) tumor suppressor genes, (3) mechanisms of drug resistance and sensitivity in malignant cells, or (4) tumor immunobiology. The appointment can be made in any of the basic science or clinical departments of the UCLA School of Medicine or in the School of Life Sciences. Candidates are invited to submit a curriculum vitae and three references to: **Marsha Emmer Addis, Deputy Director for Administration, Jonsson Comprehensive Cancer Center, 10-247 Louis Factor Health Sciences Building, Los Angeles, CA 90024-1781. UCLA is an Affirmative Action/Equal Opportunity Employer.**

## UNIVERSITY OF VIRGINIA DEPARTMENT OF PHYSICS

The Department of Physics of the University of Virginia invites applications for a tenured or tenure-track faculty position in the area of experimental condensed matter physics. Exceptional candidates in other fields will also be considered. The position may be available in September 1992. Applicants should be demonstrably able to carry out an independent research program and be committed to excellence in undergraduate and graduate education. Apply to: **Daniel Larson, Chairman, Physics Department, University of Virginia, McCormick Road, Charlottesville, VA 22901. The University of Virginia is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority candidates.**

## PLANT ANATOMY/DEVELOPMENT

Applications are invited for a tenure-track position in plant anatomy and development, at the Institut de recherche en biologie végétale, Université de Montréal, a new multidisciplinary plant biology research unit. A Ph.D. degree, postdoctoral experience, and a strong research background in electron microscopy and plant developmental biology are necessary. A capacity to use the tools of molecular biology is desirable. The position (available in June 1992) involves developing an independent research program, supervising graduate students, and undergraduate and graduate teaching in French. Candidates must accordingly have, or be willing to acquire, a good knowledge of French. Before 15 April 1992, forward curriculum vitae and statement of research interests, and arrange for three letters of reference to be sent to: **Dr. Raymond McNeil, Directeur, Département de sciences biologiques, Université de Montréal, C.P. 6128, succursale A, Montréal, Québec, Canada H3C 3J7. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.**

**TENURE-TRACK POSITIONS FOR LECTURERS IN ZOOLOGY** (1) Terrestrial ecology; (2) neurobiology. Emphasis will be placed on experimental research at the organismic level.

Candidates must possess a Ph.D., are expected to develop rigorous research that will focus on the whole organism, and to participate in teaching. Applicants should submit curriculum vitae, list of publications and request three letters of reference to be sent to: **Chairman, Department of Zoology, Tel Aviv University, Ramat Aviv 69978, Israel.**

## POSITIONS OPEN

The Division of Biological Sciences at the University of Texas, Austin, invites applications for the position of **LECTURER IN BIOLOGY**, for fall 1992. This is a non-tenure-track position but is renewable on an annual basis. Candidates should have a doctoral degree in biology or related discipline and a demonstrated interest in teaching at the undergraduate level. We are interested in someone with a broad background in biology who can work with tenure-track faculty in the development and teaching of innovative, up-to-date laboratory courses in organismal biology, ecology/population biology, and cell and molecular biology. The 9-month salary base is \$28,000 to \$31,000 depending on experience. The deadline for applications is 15 April 1992. Send a letter of application, curriculum vitae and have three letters of recommendation sent to: **Dr. M. A. Rankin, Chairman, Division of Biological Sciences, The University of Texas, Austin, TX 78712. Affirmative Action/Equal Opportunity Employer.**

## FACULTY POSITION CELL BIOLOGY

The Department of Surgery at the University of Connecticut Health Center is seeking applications for a **JUNIOR FACULTY** position in cell biology. Experience with cell culture required and interest in cell-cell communication and membrane-cytoskeleton interaction desirable. Successful candidate will join a multidisciplinary team of investigators studying oncology. Candidate will be expected to develop an independent, externally funded research program. Curriculum vitae and three letters of recommendation should be sent to: **Maureen K. Brubaker, Administrative Director, Surgical Research Center, Department of Surgery, University of Connecticut Health Center, Farmington, CT 06030-1110. The University of Connecticut is an Affirmative Action/Equal Opportunity Employer, M/W/H.**

## CENTRAL OREGON COMMUNITY COLLEGE INSTRUCTOR OF PHYSICS

Teach calculus-based and algebra-based physics. Master's in physics is required; Ph.D. or A.B.D. in physics or closely related field preferred. Salary: \$27,800 to \$34,100 (9-month, probationary, faculty appointment). Begin September 1992. Deadline: 30 March 1992. For required application, contact: **The Human Resources Office, Central Oregon Community College, 2600 N.W. College Way, Bend, OR 97701; telephone: 503-385-5513. Equal Employment Opportunity/Affirmative Action.**

## DEPARTMENT OF ZOOLOGY UNIVERSITY OF ALBERTA

The Department of Zoology is searching for two prospective **ACADEMIC STAFF MEMBERS** to fill vacancies anticipated to become available 1 July 1993. Applications are invited in any of four areas: (1) evolutionary biology, (2) aquatic invertebrate biology, (3) conservation biology, or (4) metabolic regulation in vertebrates. For areas 1 to 4 we are soliciting applications from women who could be nominated for a Natural Sciences and Engineering Research Council of Canada Women's Faculty Award, and for area 4 we encourage any applicants to apply who could be nominated for an Alberta Heritage Foundation for Medical Research Scholarship. Applicants must have a Ph.D. degree or equivalent, and preferably one or more years of postdoctoral experience. Appointments will be at the **ASSISTANT PROFESSOR** level (1991-92 base salary of \$38,955 CDN). Each position will involve some teaching responsibilities appropriate to the specialization of the appointee. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.* Submit complete curriculum vitae, names of three or more referees, and recent reprints to: **Dr. R. E. Peter, Chair, Department of Zoology, University of Alberta, Edmonton, Alberta T6G 2E9, Canada. Telephone: 403-492-3464; FAX: 403-492-7033. The search committee will begin reviewing completed files after 15 May 1992.**

*The University of Alberta is committed to the principle of Equity in Employment. The university encourages applications from aboriginal persons, disabled persons, members of visible minorities, and women.*

## POSITIONS OPEN

Engineering and Public Policy (EPP) at Carnegie Mellon University is seeking a Ph.D. engineer with outstanding technical credentials for a **TENURE-TRACK FACULTY** appointment to teach and do research on problems in manufacturing, industrial policy, R&D policy, and the management of technical change. Send résumé and sample papers to: **M. Granger Morgan, Head, EPP, Carnegie Mellon University, Pittsburgh, PA 15213.**

## TWO FACULTY POSITIONS

One position available for a **MICROBIOLOGIST** to teach medical microbiology and one position available for a **PATHOLOGIST** to teach general and organ system pathology and work independently and/or collaboratively with other research/teaching faculty. Primary responsibilities: not more than 25% of time teaching and at least 75% of time for research. Salary and academic rank open and commensurate with training, teaching experience and grant track record. Please send curriculum vitae and publications list detailing teaching experience, research interests, past, present and pending grant support information and the names of three references to: **Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, NY 11568. Affirmative Action/Equal Opportunity Employer.**

## POSTDOCTORAL POSITION

A postdoctoral position for 2 to 3 years is available immediately to study the biochemical mechanisms of growth control by the p53 or retinoblastoma tumor suppressor proteins. Projects include: (1) the cloning of proteins that interact with the p53 and retinoblastoma proteins; and (2) the post-translational regulation of p53 and retinoblastoma protein expression in lung cancer. Applicants should be experienced in protein chemistry and/or molecular biology. Send curriculum vitae and three references to: **Steve A. Maxwell, Ph.D., Assistant Professor and Biologist, Department of Thoracic Surgery, Box 109, University of Texas M. D. Anderson Hospital Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030. An Equal Opportunity/Affirmative Action Employer. Smoke-free workplace.**

## Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

### FASEB

5 to 10 April 1992, Anaheim  
Issue dates: 27 March 1992  
3 April 1992

### Analytica

5 to 8 May 1992, Munich  
Issue Date: 24 April 1992

### American Society for Microbiology

26 to 30 May 1992, New Orleans  
Issue date: 8 May 1992

### Biotechnology/Pharmaceutical Careers

Special Issue of SCIENCE  
Issue date: 8 May 1992

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## We're Miles, Ahead Of The Game.

**A**t Miles Research Center in West Haven, CT, you'll be working in the Institute for Molecular Biologicals, conducting innovative biomedical research.

As the expanding Research Center of an international pharmaceutical leader, we offer scientific challenges and opportunities for individual growth. Play your part in the advancement of therapeutic medicine in one of the following positions:

### SENIOR RESEARCH SCIENTISTS

Successful candidates will join research groups that are highly interactive, with diverse project goals in the areas of human metabolic, cardiovascular, immunological, neurodegenerative and infectious diseases.

#### Transgenic Animal Models

There is a position open in the Transgenic Animals Group, whose focus is the development of animal models of human disease. We are seeking an individual with 2-3 years' postdoctoral experience in the areas of cell and molecular biology and transgenic animal/stem cell technology. You will work with other pharmaceutical research scientists at the Miles Research Center in the design of new animal models for targeted disease indications, and will lead the research efforts in generating and characterizing such transgenic animals.

#### Biological Drug Discovery

A position is open in the Biologicals Discovery Group, which is devoted to the discovery and characterization of novel proteins that regulate the growth, differentiation and activation of mammalian cells. The group works closely with all research entities in the Miles organization, including Cutter Biologicals in Berkeley, CA. We are looking for an individual who is highly motivated, has 2-

3 years' postdoctoral experience, and has proven expertise in cell and molecular biology. Familiarity with stem cell immortalization or with growth factors/cytokines and their receptors would be an asset.

### RESEARCH ASSOCIATES

#### Transgenic Animal Models

This is a research position in transgenic animal technology. Laboratory experience with recombinant DNA technology and in gene expression analysis is required. Basic knowledge of cell biology and/or animal handling is highly desirable. MS degree or 5-10 years' professional experience.

#### Protein Chemistry

We are seeking a scientist to perform amino acid analysis, protein sequencing and related functions in the protein chemistry facility. BS degree in biology/biochemistry with two years of laboratory experience required. Experience with instrumentation and computers is desirable.

#### Protein Biochemistry

Positions available for BS and MS level scientists with a minimum of 2-3 years' laboratory experience in enzymology and protein purification and characterization. You will contribute to ongoing projects involving natural and recombinant biologicals. Experience in conventional chromatography methods, HPLC, electrophoresis and enzyme assays is desirable.

These positions offer attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. **Resumes including salary history should be forwarded in confidence to Department CEC PR, Miles Inc., Research Center, 400 Morgan Lane, West Haven, CT 06516.** An Equal Opportunity Employer M/F/H/V

### THE NATURAL HISTORY MUSEUM and IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE (University of London) CHAIR OF BIOLOGY

Collaboration between the Museum and the College offers a new and exciting opportunity in evolutionary biology. The post will combine professorial duties in the Department of Biology at the College with systematic research at the Museum. The successful applicant will be expected to:

- develop a research programme exploring the evolution of either a group of animals (including protists) or a gene complex across a range of animal groups;
- employ a range of molecular techniques for studying nucleic acids in pursuance of this research programme;
- collaborate with research teams of systematists and ecologists in both organisations;
- undertake teaching duties in evolution biology at the College.

Salary will be not less than £30,000, inclusive of London Allowance.

Potential applicants are asked to obtain further particulars from Miss E. P. Cox, Establishment Officer, Imperial College, London SW7 2AZ (Fax No. 071-581 1246). Closing date for applications: 22 April 1992.

## Aerosol Physics

**Battelle Pacific Northwest Laboratories (PNL)** is an international leader in the practical application of technology. Battelle PNL is dedicated to both basic and applied research to find ways to preserve our environment and keep America technologically competitive.

Our Inhalation Toxicology Department has an opening for an **Aerosol Physics Researcher** with Master's degree or Ph.D., 3+ years of relevant experience, knowledge of aerosol physics, respiratory drug delivery, and engineering design of inhalation test systems. This highly responsible position will supervise projects, design inhalation generating and monitoring systems, monitor results, direct technical staff, prepare proposals, and present results.

We are also seeking an **Aerosol Technical Specialist** to supervise projects and technicians and perform data collection. Requires a relevant Bachelor's degree and experience in a research laboratory environment.

Battelle PNL is located in Richland in Southeastern Washington state and offers the advantages of small town living and a wide variety of outdoor recreational opportunities. Interested candidates should send a resume to: **Battelle Recruiting Center, Dept. 6136BAH, P.O. Box 1406, Richland, WA 99352.** Principals Only. An Equal Opportunity Employer.



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## POSITIONS OPEN

### POSTDOCTORAL POSITION

Molecular and cellular factors affecting reovirus growth and transport in Kupffer cells/hepatocytes will be explored. *Candidate must be U.S. citizen.* Applicants to: Don Rubin, M.D., Research Service (151), VAMC, 1310 24th Avenue South, Nashville, TN 37212-2637. Telephone: 615-327-5287. *Equal Opportunity Employer.*

**POSTDOCTORAL POSITION.** NIH-funded position, restricted to American citizens or permanent residents, for M.D., Ph.D., or M.D./Ph.D. to study steroid hormone action at a molecular level. Research themes are receptor-hsp90 interaction, glucocorticoid regulation of GRP78/BiP synthesis, and glucocorticoid-induced programmed cell death. Send curriculum vitae and references to: Dr. Clark Distelhorst, Ireland Cancer Center, Case Western Reserve University, Cleveland, OH 44106. *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available to study repair of radiation-induced DNA damage in human cells. Specific research areas include purification and characterization of human DNA repair enzymes, mechanistic studies of DNA repair inhibitors, and modulation of cellular DNA repair by retroviral expression of DNA repair enzymes. Experience in molecular biology, biochemistry, or radiation biology is required. Interested individuals should send curriculum vitae and names of three references to: Dr. Timothy J. Jorgensen, Department of Radiation Medicine, Georgetown University Medical Center, 3800 Reservoir Road, N.W., Washington, DC 20007. *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION TERRESTRIAL ECOLOGY

Argonne National Laboratory, the nation's leading energy research and development facility, is currently seeking an ecologist to conduct research on numerical modeling of terrestrial ecosystems on large scales. Central topics of investigation include: the effects of potential climate change and the associated feedbacks between the biosphere and the atmosphere; and the effects of climate change on plant communities. Modeling on a regional scale, tied to large-scale observations, and extensive to global scales will be pursued.

The ideal candidate will have completed a Ph.D. in forest ecology or a related field within the past 18 months. Knowledge of spatial statistics, landscape ecology, biogeography, and plant ecology are required.

At Argonne, you'll find an environment that encourages both personal and professional career growth as well as excellent compensation and benefits. *We welcome applications from candidates who can contribute to our Equal Employment Opportunity/Affirmative Action goals.* For consideration, please send a résumé to: Susan M. Walker, Box ER-POSTDOC-55, Employment and Placement, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. *Argonne is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS** are available to study the molecular and cellular biology of two newly isolated lymphokines, IL-9 and IL-11. Candidates with background in molecular biology or biochemistry, interested in understanding the role of these growth factors should send their curriculum vitae and addresses of three references to: Dr. Yu-Chung Yang, Walther Oncology Center, Indiana University School of Medicine, Room 540 Medical Research and Library Building, 975 West Walnut Street, Indianapolis, IN 46202. *Walther Oncology Center is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the regulation of adhesion molecules in human neutrophils by new antiinflammatory drugs. This is a joint project with NOVA Pharmaceutical. Experience in evaluating neutrophil function and phagocyte biology is desirable. Send curriculum vitae and names of three references to: Dr. Sovitj Pou, Department of Pharmacology and Toxicology, School of Pharmacy, University of Maryland, 20 North Pine Street, Baltimore, MD 21201. *An Equal Opportunity Employer.*

## POSITIONS OPEN

**POSTDOCTORAL ASSISTANT INTERNAL MEDICINE (92CM3438).** Perform original basic research to analyze *Pneumocystis carinii* antigens and host immune responses. Must have Ph.D. in microbiology, biochemistry, molecular genetics, biological sciences, or related discipline with strong background in immunology. Individuals with M.D. degree may qualify if they have had substantial training in basic research. Résumés accepted until filled. Send letter and résumé to: Office of Recruitment Services, University of Cincinnati, Cincinnati, OH 45221-0566. *Affirmative Action/Equal Opportunity Employer. The University of Cincinnati Medical Center is a smoke-free work environment.*

**POSTDOCTORAL POSITION** immediately available to study the biology of *Chlamydia trachomatis*. Experience in recombinant DNA, immunology, and animal models for vaccine development 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, University of California-Irvine, Irvine, CA 92717. *An Equal Opportunity Employer.*

### POSTDOCTORAL POSITION

Available immediately for Ph.D. or M.D. in molecular immunology. Research will involve studies on cellular and molecular mechanisms of human B cell differentiation. This area includes (1) biochemical purification and molecular cloning of various factors and (2) regulation of lymphokine gene expression. Experience in molecular genetics is preferred; immunology training is not essential. The junior staff appointment will be considered depending upon experience. The interested candidate is encouraged to send curriculum vitae to:

Y. S. Choi, M.D., Ph.D.  
Director, Laboratory of Cellular Immunology  
Alton Ochsner Medical Foundation  
1520 Jefferson Highway  
New Orleans, LA 70121  
*An Equal Opportunity Employer.*

**POSTDOCTORAL POSITIONS IN IMMUNOLOGY** are available to study the molecular and cellular biology of Ig hypermutation in germinal centers [*J. Exp. Med.* 173, 1165 (1991); *Nature* 354, 389 (1991)]. Experience in cellular immunology or molecular biology required. Send curriculum vitae and names of three references to: Dr. G. Kelsoe, Department of Microbiology and Immunology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.

### POSTDOCTORAL FELLOW

The Rancho Santa Ana Botanic Garden graduate program in botany seeks an A. W. Mellon Postdoctoral Fellow in plant systematics and evolution. It is preferred that applicants have a strong background in quantitative and analytical methods.

In addition to research activities the postdoctoral student will be expected to lead an informal biweekly discussion group with Rancho Santa Ana graduate students.

Applicants should send curriculum vitae, three references, one or two applicable publications, and a brief plan of proposed research by 15 April 1992 to: Chair, Postdoctoral Search Committee, Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, CA 91711. *Equal Opportunity Employer.*

### POSTDOCTORAL FELLOWSHIPS IN MOLECULAR AND CELLULAR ENDOCRINOLOGY

NIH-funded postdoctoral fellowships are available in a number of laboratories at Harvard Medical School studying basic mechanisms of hormone action. *Candidates must have M.D. or Ph.D. degrees and be citizens or permanent residents of the United States.* For information and application procedures, contact: Dr. Eva J. Neer, Program Director, Harvard Medical School, Thorn Building, Room 1128, 20 Shattuck Street, Boston, MA 02115. *Harvard University is an Affirmative Action/Equal Opportunity Employer. Applications from women and underrepresented minorities are strongly encouraged.*

## POSITIONS OPEN

### POSTDOCTORAL POSITION AVAILABLE DEPARTMENT OF MEDICINE MCGILL UNIVERSITY LADY DAVIS INSTITUTE FOR MEDICAL RESEARCH

A postdoctoral position is available to study the biology and biochemistry of human tumor antigens. We will be purifying, characterizing and cloning the gene of a lung cancer-specific antigen and a membrane receptor for a liver cancer-specific protein. Experience with protein purification techniques and/or molecular biology is desired.

Dr. Elliot Alpert  
Lady Davis Institute for Medical Research  
Sir Mortimer B. Davis-Jewish General Hospital  
3755 Côte Ste. Catherine Road  
Montreal, Quebec H3T 1E2, Canada  
Telephone: 514-340-8260; FAX: 514-340-7502

**POSTDOCTORAL FELLOW** to work on project on the effects of space flight on macrophages and neutrophils in culture. Immunological function assay and signal transduction assay experience desirable. Available immediately. Send curriculum vitae and list of three references to: Dr. Gerald Sonnenfeld, Department of Microbiology and Immunology, School of Medicine, University of Louisville; Louisville, KY 40292, telephone: 502-588-6323; FAX: 502-588-7043. *The University of Louisville is an Equal Opportunity Employer.*

### POSTDOCTORAL FELLOWSHIP IN IMMUNOBIOLOGY

Position available to study the host response to parasitic infection of the gut in mice, using cellular and molecular genetic approaches. Emphasis on the role of gamma delta T cells during infection. Send curriculum vitae and names of three references within 60 days of 6 March 1992 to: Dr. Adrian Hayday, Department of Biology, Yale University, P.O. Box 6666, New Haven, CT 06511-8112. *An Affirmative Action/Equal Opportunity Employer. Women and minority group members are especially urged to apply.*

### POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Position available to investigate molecular and cellular mechanisms of birth defects. Studies include analysis of cellular signal transduction mechanisms. Particular emphasis directed toward clarification of interactions among growth factors, protein kinases and transcription factors in regulating gene expression and cell differentiation during normal and abnormal mammalian embryonic development. Strong background in biochemistry, cell and/or developmental biology required; expertise in molecular methodologies recommended. Inquiries may be sent to: Dr. Robert M. Greene, Molecular Determinants of Birth Defects Training Program, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. *Smoke-free environment. Equal Opportunity Employer.*

**POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE** Positions (two) available immediately to study channel mechanisms in ocular epithelia. The studies utilize single channel and whole cell patch clamp techniques as well as ratio imaging for ion determinations. Expression cloning and synthetic peptide studies are presently under way. Salary levels depend on the candidates' qualifications. Send résumé to: James L. Rae, Ph.D., Department of Physiology and Biophysics, Mayo Foundation, Rochester, MN 55905. *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE**, position available 1 July 1992. A unique opportunity to apply molecular biology techniques and knowledge to study skin and bone diseases in a multidisciplinary laboratory. Please send curriculum vitae, a statement of research interests, and names of three references to: Michael F. Holick, Ph.D., M.D., Boston University School of Medicine, Room M-1013, Boston, MA 02118; FAX: 617-638-8882; telephone: 617-638-4545. *Affirmative Action/Equal Opportunity Employer.*



### 1992 NOAA Postdoctoral Program in Climate and Global Change

The NOAA Climate and Global Change Program announces the continuation of its postdoctoral program, which pairs recently graduated postdoctorates with host scientists to work in an area of mutual interest. The University Corporation for Atmospheric Research (UCAR) manages the program on behalf of NOAA for the ultimate benefit of the university community and government laboratories. The objective of this program is to help create the next generation of researchers needed for climate studies.

The program endeavors to attract recent PhDs in atmospheric science and physical oceanography as well as from other applicable science backgrounds.

The overall goal of the NOAA Climate and Global Change Program is to provide predictions and assessments of global climate change on seasonal to centennial time scales.

The program offers up to a two-year visiting research appointment. Applications are solicited from postdoctoral candidates, and host scientists are invited to submit letters of intent to help the committee in the match-making process.

Postdoctoral scientists are encouraged to apply by sending a resume and a statement of research interests and experience. A clear indication of the scientific areas to be pursued and goals is particularly important. All applications should include the names and addresses of four professional references.

Scientists interested in being hosts are encouraged to send a short letter briefly stating their interest in being a host and if so inclined describing the type of background they would prefer to see in their postdoctoral fellow.

Appointments will be announced in summer 1992; application materials should be submitted by no later than 15 April 1992. Send the required information to Meg Austin, UCAR Projects Office, P.O. Box 3000, Boulder, CO 80307. For further information please contact her at (303) 497-8630 or e-mail at m.austin/OMNET or maustin@unidata.ucar.edu.

The NOAA Office of Global Programs (J. Michael Hall, Director) sponsors this program.



UCAR is an Equal Opportunity Affirmative Action employer

## Geisinger Clinic

### Postdoctoral Fellow/ Associate Scientists

Position available immediately in the laboratory of Dr. Janet Robishaw, at the Weis Center for Research to study the expression and function of structurally-distinct  $\beta$  and  $\gamma$  subunits of the signal transducing G proteins. Qualified candidates for this position will receive a highly competitive stipend with excellent benefits and the opportunity to develop your own research ideas, working in a well-equipped facility in semi-rural environment. Some familiarity with expression of recombinant protein and protein purification is desirable, but not required. Send Curriculum Vitae and three references to:

Human Resources Dept (JR)  
Geisinger Clinic, Danville, PA  
17822-3024 EOE M/F/H/V

Geisinger

# BIOTECH UPDATE

**Cyanamid offers the excitement  
of a start-up operation and the support  
and resources of a Fortune 500 company.**

The Agricultural Research Division of American Cyanamid Company recently created the Biopesticide Process Development Group in the San Francisco Bay Area in order to strengthen our work in biological control products. This operation focuses on the development of baculoviruses in insect cell culture for use as species-specific biopesticides.

Currently we have the following opportunities available:

### RESEARCH BIOLOGIST

You will plan, schedule and execute experiments related to insect cell culture and baculovirus production. A PhD with related experience in insect and insect virus physiology and/or biochemistry is necessary. Tissue culture experience, knowledge of biochemical pathways and experience in the use of scientific analysis methods are required. Dept. EW1

### BIOCHEMIST

Supporting the Cell and Molecular Biology Groups, you will develop, validate and conduct assays using HPLC, gel electrophoreses, and other analytical methods for the characterization of baculoviruses produced by insect cell culture. At least 2-3 years' experience in analytical biochemistry is required. Dept. EW2

### CHEMICAL ENGINEER

You will conduct insect cell culture experiments at the pilot plant level, prepare biopesticide active ingredients for field trials, and obtain scale-up data for the design of a manufacturing plant. An MS and 1-3 years' experience in cell culture or a BS with 2-5 years' experience is required. Insect cell culture experience a plus. Dept. EW3

Outstanding oral and written communication skills are essential for these positions. We invite you to send your c.v. in strict confidence to: American Cyanamid Company, Agricultural Research Division, 14310 Catalina Street, San Leandro, CA 94577. Please be sure to indicate appropriate department code. An Equal Opportunity Employer M/F/H/V.







## YALE UNIVERSITY The Graduate School

### ASSOCIATE DEAN FOR THE NATURAL SCIENCES

The Yale Graduate School invites applications for the position of Associate Dean to begin on July 1, 1992. This individual will be responsible for overseeing Graduate School policies in 25 science departments and programs housed in the Faculty of Arts and Sciences and the Medical School. The duties normally performed by the Associate Dean include: monitoring the implementation of academic policies of the Graduate School, supervision of graduate admissions, supervision of financial aid, advising students, and monitoring their academic progress.

A Ph.D. or equivalent and at least three years experience in teaching or administration at the university level is required. The term of appointment is 3 years and is renewable. The level of salary will be commensurate with experience.

Applications should include a *curriculum vitae* and should be supported by three letters of recommendation from individuals who are familiar with the applicant's qualifications for the position. The deadline for applications is April 6, 1992. All documents should be sent to:

Search Committee  
Graduate School  
Yale University  
Box 1504 A Yale Station  
New Haven, CT 06520-7425

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

### CHAIRPERSON, ENVIRONMENTAL HEALTH SCIENCES

The Tulane University School of Public Health and Tropical Medicine (SPHTM) invites applications and nominations for the position of Chairman, Department of Environmental Health Sciences (EHS).

The Department currently offers masters and doctoral degrees in the following program areas: Toxicology and Risk Assessment; Water Quality Management; Hazardous and Toxic Waste Management and Remediation; International Environmental Health; Occupational Health and Industrial Hygiene. Current research areas include toxicology, risk assessment, fate of toxic materials in the environment, links between adverse health effects and the environment, design of functional mitigation techniques and design of environmental monitoring programs.

Environmental Health is a premier focus of the recently adopted University Strategic Plan. Tulane has made a major commitment to research in this area through the recent establishment of Tulane's university-wide Center for Bioenvironmental Research (CBR). Major federal funding initiating CBR has been allocated to enhance infrastructure, faculty and project-specific research particularly in toxicology and risk assessment. EHS has been provided with an important share of these new resources. It is expected that the new chairman of EHS will play a major role in the further development of CBR. Candidates are being sought with academic experience and research accomplishments in one or more of the program areas noted above. An earned doctorate (PhD, ScD, MD or DrPH) is required. Demonstrated leadership in toxicology or risk assessment would be an asset.

Applications will be accepted until a suitable candidate is identified. Applications from women and persons from minority groups are particularly encouraged.

Applicants should forward a curriculum vitae, the names and addresses of three references, and a statement of professional goals, interest and experience to:

Chair, EHS Search Committee  
Office of the Dean  
Tulane University SPHTM  
1430 Tulane Avenue  
New Orleans, Louisiana 70112

### RESEARCH

## RESEARCH SCIENTIST, IMMUNOLOGY

We're a leader in monoclonal antibody technology, developing therapeutic products for life threatening diseases, and are anticipating rapid growth ahead. Currently, we have an excellent opportunity for a Research Scientist, Immunology.

You will be examining the regulation of cellular immune responses with special emphasis on the nature of interactions between T cell surface antigens and monocytes or B cells. Applications of this research will include methods to induce immunosuppression and regulate inflammation and autoimmunity.

Qualifications include a Ph.D. in Immunology, Cell Biology, or a related discipline and a minimum of 2 years' experience in monitoring cellular activation and function as demonstrated by publication in peer-reviewed journals. In addition, familiarity with models of immunosuppression is highly desirable. The ability to work independently and as part of a team is also necessary.

Xoma offers a competitive salary and excellent benefits. For consideration, please forward your resume and salary history to: XOMA Corporation, Attn: Technical Recruiter, 2910 7th Street, Berkeley, CA 94710. EOE.

# XOMA

## RESEARCH ASSISTANT

### Hematopoietic Growth Lab

An internationally recognized research facility is seeking a quality professional to participate in the studies of hematopoietic differentiation and regulation of growth of isolated stem cells and human and murine bone marrow cells. Strong knowledge of cell culture and molecular techniques required.

An MS degree or equivalent, combined with a minimum 5 years experience and background in molecular techniques such as preparation of mRNA, restriction endonuclease mapping, Southern analysis, labeling of probes for genetic analysis, and polymerase chain reaction are required.

Excellent benefits include 100% tuition refund and 26 personal days. Manhattan East 60s location. Qualified applicants should submit resume, which MUST include salary history/requirements, to: **The New York Blood Center, HG/Manager Of Human Resources, 150 Amsterdam Avenue, NY, NY 10023.** Equal opportunity employer M/F/H/V.

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## Post-Doctoral Fellow Molecular Biology

NOVA PHARMACEUTICAL CORPORATION, a leading research and development company in Baltimore, MD, seeks an individual with a recent PhD in Pharmacology, Biochemistry or Molecular Biology to pursue the cloning and expression of bradykinin receptor subtypes in eukaryotic systems. A major emphasis will be the determination of the structural elements in these receptors that govern ligand recognition by site-directed mutagenesis.

Qualified candidates will possess 0-2 years' postdoctoral experience with a strong background in basic molecular biology techniques, particularly cDNA, genomic DNA, and PCR cloning. An individual with previous experience in site-directed mutagenesis and/or the pharmacological analysis of G-protein-coupled receptors is preferred.

NOVA PHARMACEUTICAL CORPORATION offers a competitive salary and benefits package which includes company-paid health, life and dental insurance; prescription plan; profit-sharing plan and 401(k) savings plan.

For immediate consideration, please send your resume with salary history to:

NOVA PHARMACEUTICAL CORPORATION  
PERSONNEL-92-005  
6200 FREEPORT CENTRE  
BALTIMORE, MD 21224-6522



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## RESEARCH UPDATE

### Postdoctoral Scientist, Lipoprotein Gene Regulation

The Agricultural Research Division of American Cyanamid Company, has an exciting opportunity in the area of Animal Industry Discovery for a Postdoctoral Scientist to study lipoprotein gene regulation.

You will work in collaboration with the Division of Cardiology at Lederle Laboratories, which is a division of American Cyanamid Company. A PhD in Molecular Biology or Biochemistry is essential; experience in ligand-activated transcription factors, signal transduction pathways and heterologous gene expression in eukaryotic cells desirable.

American Cyanamid Company offers an excellent compensation and benefits package which includes tuition reimbursement, 401 (k) savings plan, and flex-time work schedules. We invite you to forward your c.v. to: Employment Office, Dept. PWM, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 09543-0400. An Equal Opportunity Employer M/F/H/V.



## SANOFI DIAGNOSTICS PASTEUR, INC.

### QUALITY, LEADERSHIP AND INNOVATION

Sanofi Diagnostics Pasteur, Inc. is an international leader in the design and development of instrumentation and medical diagnostic test kits for human diseases. Our continued growth and success have created a number of opportunities for highly motivated, talented professionals at various levels (BS, MS, PhD) with research and development experience in the following areas:

#### ENDOCRINOLOGY/HORMONES (MS, PhD)

This position will lead a group of scientists in developing automated immunoassays. We seek individuals with an MS or PhD in immunology, chemistry or biochemistry with 3+ years experience in immunoassay development.

#### IMMUNOLOGY (MS, PhD)

We are seeking both leaders and team members for the development of novel autoimmune assays and the support of our current products for the quantitation of serum proteins. We seek self-motivated individuals with an MS or PhD in the life sciences (immunology preferred). Knowledge of solid phase or nephelometric immunoassay development is highly desirable.

#### ALLERGY (BS, MS, PhD)

This group is searching for highly skilled and motivated individuals with a dedication to diagnostic development in the field of human allergic responses. Candidates with BS, MS or PhD level education in a related science with 1-4 years industrial experience are preferred. Experience in the characterization of proteins and protein chemistry as well as previous experience in allergy research is an advantage.

#### INFECTIOUS DISEASES (MS, PhD)

This group is focused on developing immunodiagnostic, instrument-based test kits for human infectious agents. We seek several qualified MS and PhD level candidates trained in microbiology, immunology or a related field with 1-5 years industrial experience in virologic or bacteriologic immunoassay design and development. Prior supervisory experience required to be considered for a Group Leader level position.

#### CLINICAL ASSOCIATE (BS, MS, PhD)

We are actively seeking individuals to enhance our efforts in the area of Clinical Affairs. The successful candidate will play a key role in clinical trial design and implementation as well as the preparation and submission of IND, PLA and 510(k) applications. In addition, you will provide support to critical clinical programs currently in progress. Ideally, you will hold a minimum of a BS degree in biological science and possess at least 2 years clinical affairs experience in either the diagnostic or biotechnology industry. Strong skills in written/oral communication are required, as are a sense of initiative and urgency.

Sanofi Diagnostics Pasteur, located in a western suburb of Minneapolis, offers an excellent salary and benefits package, family paid medical insurance, 401k plan and the opportunity for continued growth with a dynamic organization. For confidential consideration, please send your resume to: **Sanofi Diagnostics Pasteur, Inc., 1000 Lake Hazeltine Drive, Chaska, MN 55318, U.S.A., Attn: Patty Hale/Human Resources.**



Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### PROTEIN DESIGN AND ENGINEERING.

Postdoctoral research in design and construction of novel enzyme catalysts. Experience with PCR, mutagenesis and Ph.D. in molecular biology or biochemistry preferred. *Caltech is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Send résumé and names of three references to: **Professor F. H. Arnold, Division of Chemistry and Chemical Engineering 210-41, California Institute of Technology, Pasadena, CA 91125.**

### POSTDOCTORAL RESEARCH ASSOCIATE

available with the Center for Advanced Invertebrate Molecular Sciences (CAIMS), Entomology Department, Texas A&M University: Study molecular biology and regulation of baculovirus gene expression and function. Applicants contact Dr. M. D. Summers for details of research to be conducted. Successful applicant should be trained in molecular biology/biochemistry, and recombinant DNA techniques. Cytohistochemical background is encouraged. Salary starting at \$25,000 dependent upon qualifications. Send curriculum vitae and three letters of reference by 30 March 1992 to: **Max D. Summers, Director, CAIMS, Texas A&M University, College Station, TX 77843-2475.**

*An Equal Opportunity Employer.*

### RESEARCH ASSOCIATE POSTDOCTORAL FELLOW

Position available for Ph.D. to join and aid in the direction of an active hematopoiesis and stem cell transplantation program. Laboratory studies include (1) mechanisms of mobilization of blood stem cells, (2) influence of cytokines on stem cell subpopulations, (3) role of donor stem cells and host preparation on engraftment, and (4) protection of stem cells with regulatory molecules. Direct inquiries to:

**Peter Mauch, M.D.  
Harvard Medical School, JCRT  
50 Binney Street  
Boston, MA 02115**

**RESEARCH ASSOCIATE** for university in central Ohio. Studies the mechanisms of how the environmental mutagens induce tumors in human cells and laboratory animals at the level of molecular biology; constructs mammalian genomic libraries; isolates the mutagen-altered genes and studies gene expression; transfects isolated genes into primary human cells and cell lines; injects transfected cells into the nude mice to test tumorigenicity; evaluates the normal functions of altered genes by matching their sequences with all known sequences through computer searching of GenBank database; publishes results in peer-reviewed journals. No experience required in the duties described but applicants will qualify with the following: Ph.D. in biochemistry or molecular genetics and 2 years of experience in mammalian library construction, genomic Southern, transfection, chimeric gene construction; of the 2 years, at least 1 year of experience in site-directed mutagenesis, primary animal cell culture, S1 and primer extension assay, animal injection, GenBank database search; at least two publications in molecular genetics; experience may be gained concurrent with degree. Forty hours per week, 8:00 a.m. to 5:00 p.m., Monday to Friday; salary: \$25,320 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumés in duplicate (no calls) to: **G. Maugans, JO #1260357, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

### CENTER TECHNICAL OPERATIONS MANAGER SENIOR RESEARCH ASSOCIATE

The Center for Research on Occupational and Environmental Toxicology (CROET) at the Oregon Health Sciences University (OHSU) invites applications for a center technical operations manager, M.S. or higher in a biological science preferred. Minimum qualifications: M.S. and 5 years of diverse laboratory experience. Send curriculum vitae with names of three references by 27 March 1992 to: **Dr. P. S. Spencer, CROET, OHSU, 3181 S.W. Sam Jackson Park Road, L606, Portland, OR 97201-3098.** *OHSU is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### RESEARCH ASSOCIATE

A 1-year postdoctoral research associate position is available to maximize the expression of a bacterial ice nucleation protein gene and to localize the gene product in transgenic plants. Starting salary: \$25,000. This is a collaborative effort between Drs. N. J. Ponapoulos and S. E. Lindow at the Department of Plant Pathology, University of California, Berkeley, California (UCB), and Dr. Tony H. H. Chen, Department of Horticulture, Oregon State University, Corvallis, Oregon. The successful candidate will work at UCB. Applications including curriculum vitae (résumé, transcripts) and three letters of reference should be sent to: **Dr. Tony H. H. Chen, Department of Horticulture, Oregon State University, Cordley Hall 2042, Corvallis, OR 97331-2911** by 1 April 1992. **Telephone: 503-737-5444; FAX: 503-737-3479.** *Oregon State University is an Affirmative Action/Equal Opportunity Employer and is responsive to the needs of dual-career couples.*

**CHIEF SCIENTIST** for firm in northeastern Ohio. To set up and operate a scientific laboratory for basic research on liquid crystals. To conduct research and development aimed at improving the quality of existing products and developing new products. To characterize liquid crystals and other related materials used or to be used in the company's products to establish a database for predicting performance parameters; and to recommend the best materials for use in the company's products. To keep abreast of important new developments in liquid crystal technology through professional journals, attendance at scientific symposia, and interaction with other researchers in this field in order to be able to apply the latest and best research to the company's products and to help the company choose the right direction for business expansion. Must have Ph.D. (physics) in liquid crystals and academic program must have included one course each in the following areas: classical electrodynamics, quantum mechanics, solid-state physics, and condensed matter physics. As evidenced by academic letter(s) of reference and/or publication(s) and/or employer testimonial(s), must be conversant with the physics of liquid crystals and the nonlinear optics of liquid crystals, as well as with characterization of liquid crystalline materials using lasers and spectrophotometers and liquid crystal cell preparation using homogeneous, homeotropic, and hybrid alignments. Forty hours per week, 8:00 a.m. to 5:00 p.m., salary: \$43,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé and course transcript in duplicate to: **G. Maugans, JO #1269048, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

### FUEL CELL CATALYST DEVELOPMENT MANAGER

Responsible for the formulation and recommendation of company's Phosphoric Acid Fuel Cells (PAFC) catalyst development program. Plan, organize, coordinate, and supervise activities concerned with the development of new PAFC catalysts. This includes managing and directing projects aimed at commercializing fuel cell technology in Japan, while increasing product sales in the United States. Review and evaluate results and conclusions of laboratory work and pilot plant projects, applying knowledge of catalyst preparation, electrode fabrication and catalyst and electrode evaluation methods. Manage operation and control of development laboratory and coordinate development efforts with Research Director in the United Kingdom. Requires Ph.D. in electrochemistry (Ph.D. research/thesis must be in the theory of photoelectro-chemistry as applied to the design, construction and operation of apparatus to accurately measure electric currents in the nanoamp range). Position requires 1 1/2 years of direct experience in the job as described or 2 1/2 years of related experience as a researcher (related experience must be in the research and development of new products/processes for PAFC. Salary: \$48,000 per year; 40 hours per week, 9:00 a.m. to 5:00 p.m., no overtime. Job site: West Deptford, New Jersey. *Must have proof of legal authority to work in the United States.* Send résumé in duplicate to: **New Jersey State Employment Office, 251 North Delsea Drive, Deptford, NJ 08096. J.O. #0497320.** No fee charged.

## POSITIONS OPEN

**ASSISTANT STAFF RESEARCHER—GASTROENTEROLOGY.** Health care and medical research facility seeks staff researcher for gastroenterology research team to perform intracellular recording and labeling studies to characterize the structure-function relationships of intestine-sensitive and gustatory neurons in the nucleus of the solitary tract of adult and neonatal rats; use quantitative and qualitative microscopic techniques to reconstruct and analyze labeled cells using commercially available computer software; use Ussing chamber apparatus to determine transmural intestine ion flux in vitro; use single pass perfusion technique to determine water absorption in the intestine in vivo, following electrical current or chemical stimulation of various CNS nuclei; use microsurgical techniques to selectively transect afferent vagal rootlets in adult rats. Minimum qualifications: Ph.D. with major field of study neurophysiology, neuroanatomy or related area. Employer will accept professional degree in medicine with 1 year of research experience in neuroanatomy, in lieu of listed education. Two or more refereed journal publications in neuroanatomy and/or neurophysiology of intestinal function. Two years of experience as research associate/research fellow studying central nervous system control of intestinal function including intracellular recording and labeling. Full-time; 9:00 a.m. to 5:00 p.m., salary: \$35,000 per year. **Résumé to: Michigan Employment Security Commission, 7310 Woodward, Room 415, Detroit, MI 48202, Ref. # 6692.** *Equal Opportunity Employer-paid advertisement.*

Applications are being accepted for an **INORGANIC CHEMIST** with high degree of expertise in inorganic and physical chemistry. Position will be responsible for working independently or with limited supervision on research and development, support, and consultancy activities pertaining to nuclear and/or hazardous waste treatment and environmental restoration of contaminated sites. Responsibilities will include: independent planning, execution, analysis, and supervision of research and development on treatability studies of nuclear and/or hazardous wastes; independent planning, execution, analysis, and supervision of Planning and Long Range Technical Support (PLRTS) environmental site milestones; consultancy and technical support for the Central Neutralization Facility (CNF); consultancy and technical support for the TSCA incinerator; planning of decontamination and decommissioning research and development activities with generation of innovative research proposals; publication and presentation of the performed research and development activities entailing progress and final reports and refereed external reports. The activities will require direct interaction with technicians, project management, sponsors, contractors, and government agencies. Position requires a Ph.D. in chemistry and a minimum of 5 years of relevant experience in the chemistry and handling of uranium, transuranium and plutonium elements, and fission products, including work in radiochemical hoods and glove-boxes. Experience must include 3 years in the treatment and solidification technologies of nuclear and/or hazardous wastes, material testing and characterization of the raw and treated waste, radiochemical techniques, and radiation protection of the personnel involved. Excellent written and oral communication skills. Requires substantial leadership and supervisory skills, and achieving results in a matrix/teaming environment are necessary. A thorough knowledge of the advertised field, as evidenced by strong publication record, is essential for the integration of that knowledge into a highly diverse and interactive departmental atmosphere. Proposed job located in Oak Ridge, Tennessee. Basic work week is 40 hours. Salary for the position is \$3780 per month. Qualified Ph.D. applicants should forward a résumé, three letters of recommendation, and academic transcripts to: **Tennessee Department of Employment Security, Department GDDC, J.O. #TN1317994, P.O. Box 11088, Chattanooga, TN 37401.**

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## CHAIR

### Department of Anatomy, Cell Biology & Neurobiology Albany Medical College

Albany Medical College invites applications and nominations for the position of Professor and Chair of Department of Anatomy, Cell Biology & Neurobiology. Candidates should be well-established Neuroscientists with a strong commitment to medical/graduate student training and scholarly research. The candidate selected will possess high level administrative, academic, and research credentials providing leadership and managerial expertise to the Department. The successful candidate will foster the development of research programs with emphasis on Neuroscience. The Chair is expected to administer the Department in a manner consistent with the College's academic goals as well as support the career development of departmental faculty. Interactions with other academic departments are also to be facilitated. The position offers an excellent opportunity to develop an outstanding department in the environment of an expanding academic health science center.

Applicants should send curriculum vitae and references to: Dr. John E. Kaplan, Chair, Search Committee, Albany Medical College, Graduate Studies Program, A-1, Albany, NY 12208. Albany Medical College is committed to increasing representation of women and minority groups on its faculty and routinely encourages applications from such candidates.

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## MILES

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Division

**M**iles Inc., Pharmaceutical Division, has two outstanding opportunities in its expanding Research Center headquartered in West Haven, CT.

The positions are in a growing and fully integrated Structural Chemistry group that collaborates in multidisciplinary biotechnology and pharmaceutical research. Structural Chemistry currently incorporates NMR, X-ray Crystallography, Mass Spectrometry and Computational Chemistry to support structural elucidation studies and novel drug design efforts.

### N M R S P E C T R O S C O P I S T

A Ph.D. or M.S. with 3-5 years of experience in analytical NMR and NMR instrumentation is required. The NMR analytical laboratory is currently equipped with a research grade GN-Omega-300 MHz and a QE 300 MHz NMR spectrometer.

### C O M P U T A T I O N A L C H E M I S T

A Ph.D. with 3-5 years' postdoctoral experience in the area of protein and small molecule modeling and computations is required. Knowledge of current drug design methodologies, experience with molecular and quantum mechanics, and software and program development skills are essential.

Structural Chemistry is currently equipped with a dedicated Convex C-220, graphics workstations and access to a CRAY supercomputer.

These positions offer attractive compensation commensurate with experience, benefits package, relocation assistance and professional growth opportunities. For consideration, please send resumes in confidence to: **Department CEC RT, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.**

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## Senior Research Biochemist/Molecular Immunologist

Applicants are invited for a position in the Department of Autoimmune Diseases Research within the Division of Immunology and Inflammation Research. The Merck Sharp and Dohme Research Laboratories have made a long term commitment toward understanding autoimmune diseases at the molecular level. Using biochemical, molecular cell biological and/or biophysical approaches, the successful candidate will develop a research project focused on the assembly of MHC class II molecules and the biochemistry of antigen processing and peptide loading. A Ph.D. and postdoctoral training in biochemistry, cell biology, molecular biology or immunology is required. A strong desire to be part of a drug discovery team and excellent communication skills are necessary to work effectively in this multidisciplinary group.

Merck Sharp & Dohme Research Laboratories is located in Rahway, New Jersey, approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, send your resume and the names of three references to: **Susan F. Marsella, Merck & Co., P.O. Box 2000, AD #107, Rahway, New Jersey 07065, R80-A3.**

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## POSTDOCTORAL OPPORTUNITY

**Lederle-Praxis Biologicals**, a business unit of American Cyanamid Co., is recognized internationally as a leader in the research, development and manufacture of vaccines for prevention of viral and bacterial disease. Currently, the Department of Viral Vaccine Research and Development is seeking an energetic and talented individual to work as an integral member of a multi-faceted scientific team.

Projects will involve analysis of host immune responses to viral antigens, both *in vitro* and *in vivo*. Studies will primarily focus upon the identification and characterization of cellular and humoral correlates of vaccine-mediated protection. There will also be extensive interaction with our protein chemistry, molecular biology and cell biology groups in the context of the development and immunological evaluation of recombinant and natural viral vaccine candidates.

The individual we seek will be a recent graduate of a Ph.D. degree program in Immunology. Hands-on experience in cellular immunology, virology and cell culture is desirable.

We offer an excellent salary and benefits package, including a 401K savings plan, and a convenient Rockland County location 25 miles north of New York City. If you're ready to make a contribution to a challenging program, send your resume to: Dept. CQ-EM, Personnel Section, Lederle Laboratories, Pearl River, NY 10965. We are an equal opportunity employer.



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This national program, sponsored by the AAAS, is designed as a blueprint for science education. Project 2061 is based on the premise

that students learn best when connections are made between fundamental scientific theories and real-life applications. From rural Georgia to San Francisco; from Philadelphia to suburban Wisconsin, the AAAS is working with teachers to design the science curriculum of the future.

Although just a beginning, AAAS and its members are

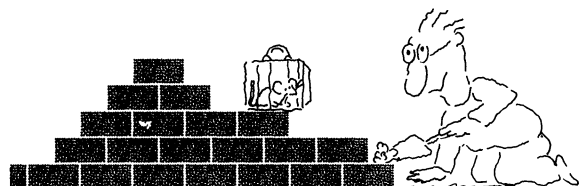
not only dedicated to the advancement of science today, but through Project 2061 and other educational programs, to the continual advancement of science in years to come.



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## Research Associate Experimental Pathology

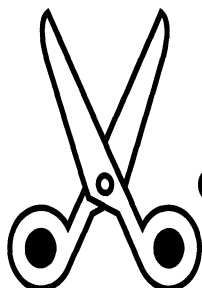
Amgen, an innovative leader in the discovery, development, and marketing of human therapeutics through applied biotechnology, is currently seeking a Research Associate in our Experimental Pathology Department.

Qualified applicants should have a background in Western and Northern analysis, slot blot analysis, immunohistochemistry, and/or *in situ* hybridization. Additional experience in *in vivo* modeling is also desired. Applicants must be interested in learning and developing new techniques. Experience with growth factors and targets such as epithelial and endothelial cells is also preferred. At least 6 years of relevant experience is preferred.

**Amgen offers an excellent compensation and benefits package** as well as a challenging research environment on the leading edge of biotechnology. If you would like to be a part of an organization that places a high priority on its human resources, please send a resume, in confidence, to: **John Tarpley, HT(ASCP), Amgen Inc., Amgen Center 5-1-A-226, Thousand Oaks, CA 91320-1789.** Amgen is an equal opportunity employer.

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Baxter Diagnostics Inc., a wholly owned subsidiary of Baxter Healthcare Corporation, is a leading supplier of diagnostic products and instrumentation for clinical laboratories. Presently, we have the following openings in our STRATUS Immunochemistry Business working in an interdisciplinary R&D group involved in exploring new technology, supporting new products and the current product line, and transferring technology from R&D to Manufacturing.

## PH.D BIOCHEMIST

The selected candidate will have a recent Ph.D. in Biochemistry or Bio-Organic Chemistry with 1-2 years postdoctoral experience. Laboratory training in protein modifications, protein purification and characterization utilizing modern physico-chemical techniques is required. Self motivation and the ability to operate in a multifunctional environment is a must. Knowledge of immunology is also desirable.

## B.S. ORGANIC CHEMIST

This candidate will have a recent B.S. with at least one year of laboratory experience in the synthesis of organic compounds. Knowledge of Biochemistry and/or Immunology is highly desirable. Good written and oral communication skills are a must.

These positions are located on the east coast of South Florida where, in addition to paying no state or local income taxes, you will enjoy a year-round lifestyle which attracts new residents and visitors from around the world. Baxter Diagnostics Inc. offers an excellent benefit package.

For immediate confidential consideration, please send resume, indicating position of interest, to: Baxter Diagnostics Inc., P.O. Box 520672, M.S. #348, Miami, FL 33152. Equal Opportunity Employer. We Conduct Pre-Employment Drug Testing.

**Baxter Diagnostics Inc.**

**Baxter**

### GRADUATE STUDY IN PLANT SYSTEMATICS THE RANCHO SANTA ANA BOTANIC GARDEN GRADUATE PROGRAM IN BOTANY

The Rancho Santa Ana Botanic Garden has recently received a generous grant from the A. W. Mellon Foundation in support of its long-standing and successful graduate program in plant systematics. Graduate students are exposed to a wide range of modern methods and approaches to solving problems in plant systematics and evolution. The breadth of this program is reflected in the specialties of the faculty: molecular systematics, phytochemistry, traditional systematics (floras, revisions, monographs), biogeography, conservation biology, cytogenetics, reproductive biology, anatomy, and morphology. Support for graduate students has been greatly enhanced by this grant, which provides for field and laboratory expenses, as well as personal and academic support. Prospective applicants [for Fall, 1992] are encouraged to either write or telephone for further information and application materials:

**Thomas S. Elias, Director**  
Rancho Santa Ana Botanic Garden  
1500 North College Avenue  
Claremont, California 91711  
(714) 625-8767;  
FAX: (714) 626-7670



The Goddard Space Flight Center located in Greenbelt, Maryland has an opening for Hubble Space Telescope Project Scientist. The Project Scientist is the senior scientific advisor to the Hubble Space Telescope Project Manager, and reports directly to the Director of the Space Sciences Directorate. Applicants should have demonstrated expertise in astrophysics research, astronomical instrumentation in space, and observational and operational techniques suitable for space observatories. Salary range (\$64,233 to \$104,000) depending upon level and quality of experience. A Ph.D. degree and/or equivalent experience in space astronomy is required.

Candidates should submit a resume or Application for Federal Employment (SF-171) and list of publications to the NASA/Goddard Space Flight Center, Office of Human Resources, Code 115A, Greenbelt, MD 20771. Applications must be postmarked no later than April 30, 1992. Inquiries should be directed to Cricket Stevenson at (301) 286-7439. U.S. Citizenship required. EQUAL OPPORTUNITY EMPLOYER.

### POSITIONS OPEN

**ENDOCRINE MOLECULAR BIOLOGIST** sought by Veterans Affairs Medical Center (VAMC) and the University of Washington (UW) to conduct independent and collaborative research, to support an endocrine molecular biology core laboratory, and to supervise and oversee training of investigators, fellows, and technicians in techniques of molecular biology. A research focus in bone and mineral metabolism, reproduction, or neuroendocrinology is preferred. Evidence of ability to attract external funding expected. Salary and research faculty rank will depend on qualifications. Write with curriculum vitae to: **Dr. George R. Merriam, Chair, Search Committee, Research Service (151), VA Medical Center, American Lake, Tacoma, WA 98493.** VAMC and UW are Equal Opportunity/Affirmative Action Employers.

**MARINE MOLECULAR BIOLOGIST.** The Bermuda Biological Station for Research, Inc. (BBSR), is reopening a search for a molecular biologist. We seek an outstanding individual with at least several years of postdoctoral experience to develop new funded programs involving the application of molecular biology to marine research problems. BBSR is a vigorous U.S. not-for-profit research and educational institution with growing programs in biological and chemical oceanography, symbiosis, coral reef ecology and atmospheric research. We expect that the successful applicant will interact and collaborate with the resident faculty, and that his/her research programs will take advantage of the resources, facilities and physical setting of the BBSR. Please send letter of application with curriculum vitae and three letters of reference by 15 April 1992 to: **Dr. C. B. Cook, Molecular Biology Search Committee, Bermuda Biological Station for Research, Inc., 17 Biological Station Lane, Ferry Reach GEO1, Bermuda.** The BBSR is an Affirmative Action/Equal Opportunity Employer.

**NEUROBIOLOGIST.** As part of an initiative to expand research and teaching, a new position for a tenure-track assistant professor is open in the Department of Anatomy and Cell Biology at the University of Kansas Medical Center (KUMC). Applicants should have a Ph.D. and/or M.D. and a minimum of 2 years of postdoctoral research experience. Candidates are expected to develop an externally funded, innovative research program. All qualified applicants with an interest in cellular, developmental or molecular neurobiology are encouraged to apply. The successful candidate will be expected to teach in one of the basic medical courses offered by the department and participate in the graduate program. The earliest start date is 1 January 1993. Applicants should provide curriculum vitae, including a summary of present and future research interests and three references to: **Dr. Nancy E. J. Berman, Search Committee Chair, Department of Anatomy and Cell Biology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7400.** KUMC is an Equal Opportunity Employer.

**RESEARCH ENDOCRINOLOGIST** sought by Veterans Affairs Medical Center (VAMC) and the University of Washington (UW) to conduct and develop independent and collaborative research, to oversee a core endocrine laboratory, and to supervise training of investigators, fellows, and technicians in endocrine research techniques. A research focus in neuroendocrinology or reproductive endocrinology is preferred. Initial salary support provided, research faculty rank will depend on qualifications. Write with curriculum vitae to: **Dr. George R. Merriam, Chair, Search Committee, Research Service (151), VA Medical Center, American Lake, Tacoma, WA 98493.** VAMC and UW are Equal Opportunity/Affirmative Action Employers.

**RESEARCH SCIENTIST.** Recent Ph.D. in bacterial genetics/molecular biology to join our team of scientists in developing oral vaccines and passive immunity products. OraVax is committed to the development of novel products targeted against mucosally acquired infections. Candidates should have at least 2 years of postdoctoral experience, a strong research background in molecular pathogenesis is highly desirable.

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## POSITIONS OPEN

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### RESEARCH SCIENTIST POSITION

The Department of Diabetes and Metabolism at the City of Hope Medical Center invites applications for a tenure-track research scientist position. Preference will be given to candidates at the assistant or associate research scientist level. The department is primarily focused on research related to the cellular and molecular mechanisms leading to cardiovascular and renal disease in states of insulin resistance and diabetes. In addition, collaborative studies related to mechanisms of altered insulin secretion and action are planned. Candidates must have a Ph.D. degree in an appropriate discipline and relevant postdoctoral experience. The candidate will be expected to develop and maintain an independent, externally funded research program. Start-up equipment and/or funds may be available. Applicants should send their full curriculum vitae, a letter of application including a description of research interests and names of three references by 15 April 1992 to: **Jerry L. Nadler, M.D., Director, Department of Diabetes, Endocrinology and Metabolism, City of Hope Medical Center, 1500 East Duarte Road, Duarte, CA 91010. Telephone: 818-301-8486; FAX: 818-301-8489. Affirmative Action/Equal Opportunity Employer.**

**SCIENTIST; R&D** involving synthesis of specialty emulsion polymers with properties designed into polymer structures. Examination of colloidal properties and control during synthesis. Improve latex design for environmentally friendly architectural coatings encompassing studies of latex film formation mechanism and ambient cross-linking pertaining to developing latexes utilizing minimal levels of organic solvents. Requirements: Ph.D. in organic chemistry, 2 years of experience RA/TA with strong background in organic and organometallic chemistry with in-depth knowledge of colloid science, polymer chemistry and physics. Demonstrated ability to study reaction mechanisms for complex systems by physical, chemical and instrumental methods with knowledge of olefin chemistry/polymerization. Background in reactions of three-membered ring compound such as epoxides and heterogeneous (two-phase) reaction systems, solid-state electron transfer mechanism study and asymmetric synthesis and catalysis and film forming from polymers with related instrumentation background. Must have excellent academic and publication record. Forty hours per week; salary: \$49,500 per year; résumé to: **Philadelphia Job Bank, 444 North 3rd Street, Philadelphia, PA 19123. J.O. #4427974.**

### STAFF OFFICER ENVIRONMENTAL BIOLOGY

The Board of Environmental Studies and Toxicology of the National Research Council (NRC) is seeking a staff officer to assist with scientific committees in its program on applied ecology and natural resources. Responsibilities include assisting with the direction of a committee of experts and providing intellectual overview of reports. Requires an M.A./M.S. or equivalent (Ph.D. preferred) in environmental biology (e.g., ecology, fisheries, forestry, wildlife management), Washington, D.C., experience, ability to meet multiple deadlines effectively, and excellent organizational skills. Knowledge of Congress and federal agencies desirable. Please send résumé in confidence to: **NRC/BEST, HA 354 (DP), 2101 Constitution Avenue, N.W., Washington, DC 20418. Equal Opportunity Employer. Nonsmoking work environment.**

**TOXICOLOGIST/PUBLIC HEALTH SPECIALIST/INDUSTRIAL HYGIENIST**—B.S., M.S. or Ph.D. in related field. Young, rapidly growing environmental consulting firm seeks senior, junior, or entry level professionals to join staff. Positions available in Tallahassee, Florida, and Little Rock, Arkansas. Excellent benefits and working environment; salary negotiable. Send résumé to: **TERRA, Inc., 325 John Knox Road, Atrium Building, #201, Tallahassee, FL 32303.**

6 MARCH 1992

# Postdoctoral Fellowships in Biotechnology

Postdoctoral positions are available in the Department of Biotechnology for motivated and independent individuals interested in applying modern techniques in molecular biology and biochemistry to problems of basic cellular biology. The department consists of an interactive group of scientists dedicated to the investigation of the basic mechanisms underlying metabolic, cardiovascular, neurological and infectious diseases. Research opportunities are available in the laboratories of:

**Dale Oxender:** Cloning and characterization of mammalian membrane transporters.

**Tammy Antonucci:** Cellular interactions and regulation of HIV-encoded gene products.

**Todd Leff:** Transcriptional regulation of eukaryotic genes. Molecular biology of the cardiovascular system.

**James Offord:** Molecular biology of ion channels in pancreatic B cells.

**Eric Olson:** Prokaryotic gene regulation and signal transduction. Emphasis on *E. coli* and *S. aureus* mechanisms.

**Russell Wyborski:** HSV-1 mediated transfection of neurons and glial cells; neuronal promoter regulation; neuronal differentiation.

Applicants should be recent MD or PhD graduates in biochemistry, molecular biology, neurosciences, microbiology or pharmacology with working knowledge of molecular and/or cell biology techniques. Experience in protein chemistry and/or microbiology would be desirable. However, an applicant's overall ability, enthusiasm and motivation are as important as the precise nature of previous experience. Interactions with our colleagues at nearby University of Michigan and other academic institutions, as well as publication of research findings, are strongly encouraged. Interested scientists should send a CV and list of references to **PARKE-DAVIS, Human Resources, Box JDM-P816, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"**

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## COURSES AND TRAINING

**DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOLOGY.** Interdisciplinary program seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$10,000 to \$15,000 available on a competitive basis. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

**JACKSON LABORATORY** announces a course for graduate students and postdoctoral fellows. Experimental Genetics of the Laboratory Mouse, 23 August to 4 September 1992. An intensive 2-week course that provides training in principles of mouse genetics and methods of genome analysis. The combination of lectures, discussion groups, and demonstrations will be presented by a faculty assembled from several leading institutions. Inquiries/applications: **Phyllis Mobraaten, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609, telephone: 207-288-3371, extension 1376.** Enrollment: limited to 30 students. Registration fee: \$850, includes room and board at the historic Highseas Conference Center.

### TOXICOLOGY TRAINING PROGRAM

The University of Texas Medical Branch (UTMB) is currently seeking applicants for an integrated, interdepartmental program in environmental toxicology mechanisms. Stipends are available for predoctoral and postdoctoral candidates through the NIH/NIEHS-funded program. Training is provided through the combined expertise of faculty from both the Medical School and Graduate School of Biomedical Sciences and encompasses disciplines of molecular, biochemical, organ, genetic, and clinical toxicology. Predoctoral students are affiliated with specific Graduate School Departments and earn the Ph.D. degree. Postdoctoral fellows are based with individual program faculty. For complete information please write or telephone: **Dr. K. Lemone Yielding, Program Director, Toxicology Training Program, 528 Administration Building, A-33, University of Texas Medical Branch, Galveston, TX 77550. Telephone: 409-772-3088.** UTMB is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.

### TRAINING PROGRAM IN MEMBRANE RECEPTORS AND TRANSPORT PROTEINS AT COLUMBIA UNIVERSITY

We invite applications for pre- and postdoctoral training in this NIH-sponsored, interdisciplinary program involving biochemical, biophysical, cell biological, and molecular genetic approaches to membrane proteins and processes. The training faculty are Myles Akabas (physiology and cellular biophysics), Qais Al-Awqati (medicine and physiology), Eric Holtzman (biological sciences), Kurt Drickamer, Barry Honig, Thomas Jessell, Arthur Karlin (biochemistry and molecular biophysics) and Norman Latov (neurology). To qualify for NIH training grant support, applicants need to be U.S. citizens or permanent residents. Applicants should send their curriculum vitae and three letters of reference to any of the faculty or write for more information to: **Arthur Karlin, Center for Molecular Recognition, Columbia University, 630 West 168th Street, New York, NY 10032.**

Columbia University takes Affirmative Action to ensure Equal Opportunity.

## COURSES AND TRAINING

### 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 PHYSICAL SCIENTISTS

A 1-week intensive course sponsored by the Massachusetts Institute of Technology (MIT), 15 to 19 June 1992, 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 Session, 617-253-2101.**

**METHODS IN COMPUTATIONAL NEUROSCIENCE**, 2 to 29 August 1992. This lecture and intensive computer laboratory course is for 20 advanced graduate students, postdoctoral fellows and faculty in neurobiology, physics, electrical engineering, computer science, mathematics, or psychology with an interest in "Computational Neuroscience." A background in programming (preferably in C and UNIX) is highly desirable. Students are expected to work on a simulation project of their own choosing. Directors: **James M. Bower, Christof Koch, Computation and Neural System Program, California Institute of Technology. Tuition: \$1000, includes room and board. Partial financial aid is available to qualified applicants. Application deadline: 15 May 1992.** For further information and applications, contact: **Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543. Telephone: 508-548-3705, ext. 216.**

Medical University of South Carolina (MUSC) offers **PROGRAMS LEADING TO Ph.D. AND M.D./Ph.D. DEGREES IN EACH OF THE BASIC BIOMEDICAL SCIENCES** (anatomy, biochemistry, microbiology/immunology, pathology, pharmacology, physiology), biostatistics/epidemiology/systems science, pharmaceutical sciences, and molecular and cellular biology. Stipends (\$10,000 to \$15,000) available to qualified students. Contact: **College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425.**

**WORKSHOP ON MOLECULAR EVOLUTION**, 2 to 14 August 1992. This workshop will consist of a series of lectures and discussions, and a computer laboratory for phylogenetic and sequence analysis. Lectures on the theoretical basis of comparative sequence analysis, phylogenetic tree construction, and current topics in molecular evolution will be presented. Enrollment limited to 60 students. Tuition: \$600, includes room and board. Director: **Mitchell L. Sogin, Center for Molecular Evolution, Marine Biological Laboratory. Faculty: M. Belfort, SUNY, Albany; M. Donahue, University of Arizona; J. Felsenstein, University of Washington; W. Gilbert, Harvard University; M. Kreitman, University of Chicago; D. Maddison, Harvard University; R. Milkman, University of Iowa; G. Olsen, University of Illinois; D. Swofford, Illinois Natural History Survey; and others.** Application deadline: 1 June 1992. For further information and application forms, contact: **Florence Dwane, Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543. Telephone: 508-548-3705, ext. 216.**

**WORKSHOP ON MOLECULAR EVOLUTION**, 2 to 14 August 1992. This workshop will consist of a series of lectures and discussions, and a computer laboratory for phylogenetic and sequence analysis. Lectures on the theoretical basis of comparative sequence analysis, phylogenetic tree construction, and current topics in molecular evolution will be presented. Enrollment limited to 60 students. Director: **Mitchell L. Sogin, Center for Molecular Evolution, Marine Biological Laboratory. Application deadline: 1 June 1992.** For further information and application forms, contact: **Florence Dwane, Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543. Telephone: 508-548-3705, ext. 216.**

## ANNOUNCEMENTS

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To attend or have résumé distributed to participating firms—send copy to: **Career Expo, 2100 Embarcadero, #101, Department B, Oakland, CA 94606.** For exhibit information, telephone: 510-436-3976.

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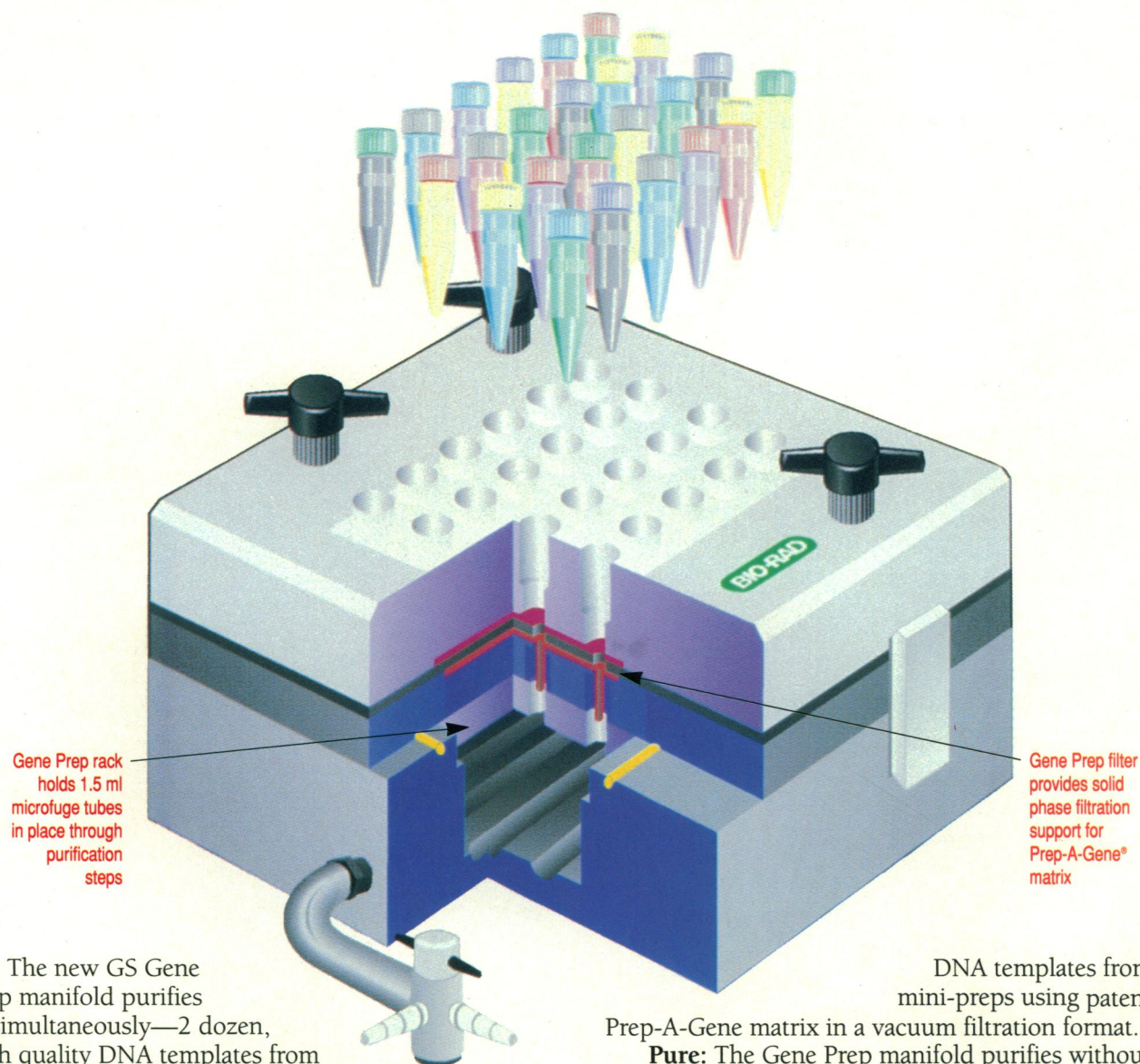
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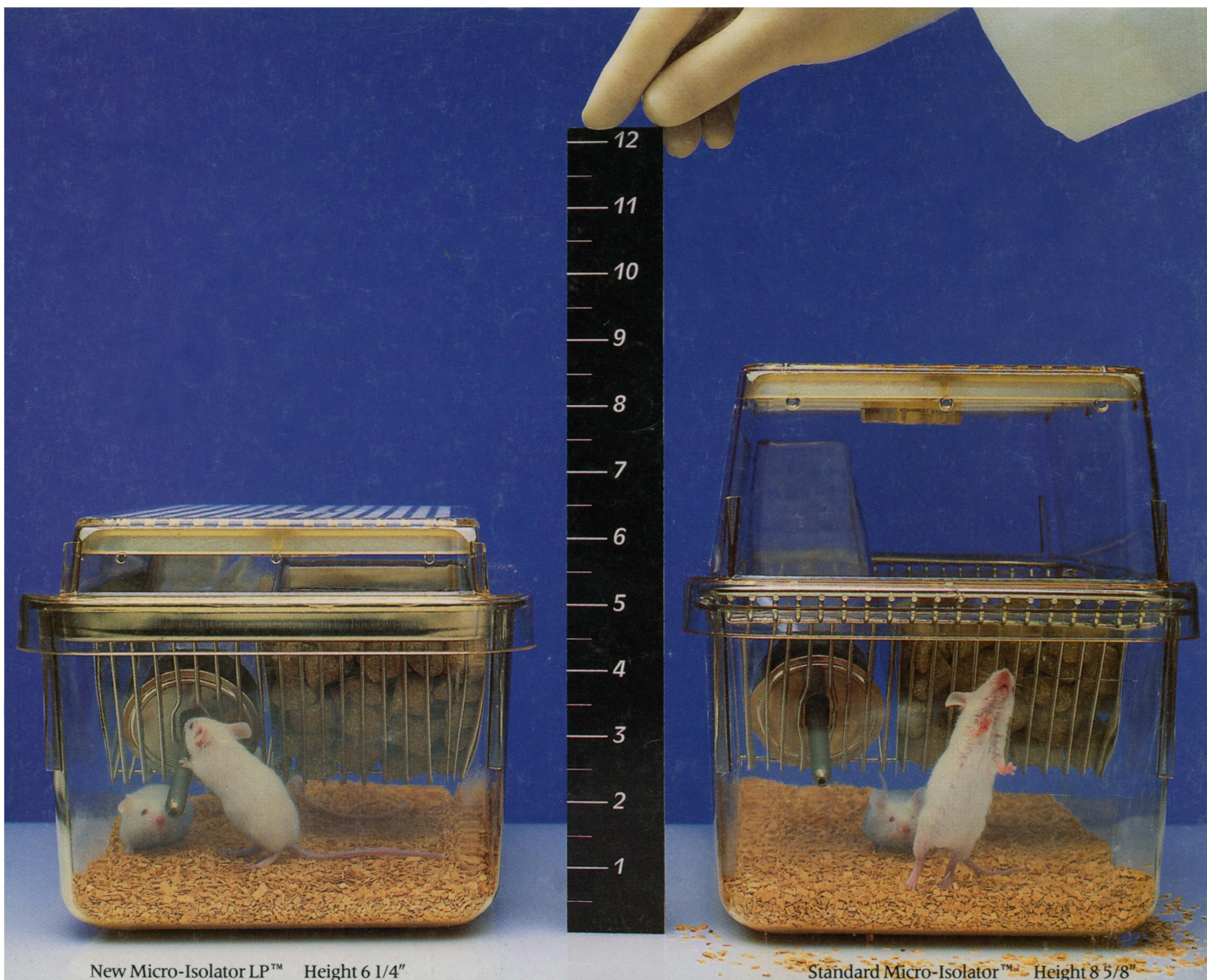
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