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Here at our U.S. laboratories in Edgewater, NJ, scientists with degrees in Analytical, Organic, Inorganic and Physical Chemistry; Biochemistry and Biological Sciences, and Chemical Engineering will find an environment where the challenge is to think across the conventional boundaries of science. Also in Edgewater is our recently established Skin Care Research Center where we are bringing together talented and creative individuals from a variety of areas — cell biology, colloid and surface science, pharmacology, behavioral science, material science, immunology, histology, enzymology, cellular differentiation and others — to explore and investigate the science of skin in a whole new way.

Challenge, freedom, variety. For the very reasons you chose science as a career in the past, it's time to choose Unilever as your future. For consideration, send your resume to: James R. Conti, Manager, Employee Relations, Dept. WIS93, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. An equal opportunity employer.



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# Give Us Your Views on "Women in Science"

Science would very much like to know your response to this year's Women in Science section on Gender and the Culture of Science. Please take a moment to fill out this form and return it—by fax or mail—to the address below.

1) Do you think that there is a "female style" of doing science?

☐ Yes      ☐ No      ☐ Not sure

If yes, what examples come to mind? (Feel free to attach additional sheets.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2) How much do you think gender influences:

	A great deal	Some	Not at all
The way a researcher runs his/her lab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactions with colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choice of research problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The outcome of research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you think gender is a factor, what examples come to mind?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3) Do you think the culture of science needs to be altered so that it is more accommodating to women?

☐ Yes      ☐ No      ☐ Not sure

If so, how does the culture need to be changed—and how could those changes be made?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4) Which parts of this year's section on Women in Science did you like the best? The least? Why?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5) What subjects do you think should be covered in future sections on Women in Science?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Scientific Discipline: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Send to: Science News Department  
c/o John Benditt, Features Editor  
1333 H St. NW  
Washington, D.C. 20005  
FAX: (202) 408-8015

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# SCIENCE

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## POSITIONS OPEN

### PLANT PHYSIOLOGY THE OHIO STATE UNIVERSITY

We seek a Ph.D. plant physiologist for a 9-month, tenure-track position at the **ASSISTANT PROFESSOR** level. The successful applicant shall develop a modern, externally funded research program. Postdoctoral experience is expected. This position also requires the direction of graduate students, the teaching of an advanced course in the person's specialty, and contributions to the department's lower-division offering. Send curriculum vitae, reprints, statements of research interests and teaching philosophy, and three letters of reference to: **Dr. Roger P. Hangarter, Search Committee, Department of Plant Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210 U.S.A.** Review of applications will begin on April 15, 1993, and continue until a suitable candidate is found. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.*

### CANCER RESEARCH POSITIONS AVAILABLE AT THE NORRIS COTTON CANCER CENTER (NCCC), Dartmouth Hitchcock Medical Center

Applications for faculty positions (**ASSISTANT to FULL PROFESSOR**) are invited from scientists who are studying breast, colon, lung, prostate, or ovarian cancer. The full-time research positions will be available as of July 1, 1993. The successful candidates will become members of appropriate departments at Dartmouth Medical School. The responsibilities include developing a strong, externally funded research program that will form a bridge between basic and clinical personnel and contributing to graduate education. The NCCC is an NCI-sponsored Comprehensive Cancer Center with academic membership from both Dartmouth Medical School and Dartmouth College. All applicants should have a M.D. or Ph.D., relevant postdoctoral training, and will be expected to be independently productive but capable of effective cooperative interactions. Send curriculum vitae, description of research interests and names of three academic references to: **Dr. Edward Bresnick, Director, Norris Cotton Cancer Center, Dartmouth Hitchcock Medical Center, 1 Medical Center Drive, Lebanon, NH 03756-0001.** *Dartmouth College is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### AIDS VIROLOGIST OR IMMUNOLOGIST FACULTY POSITION

The University of Washington seeks candidates at the **ASSISTANT or ASSOCIATE PROFESSOR** level to do research on AIDS molecular virology or immunology with joint appointments in the Department of Pathobiology, School of Public Health, and Regional Primate Research Center.

Candidates should have experience in retrovirology, immunology, or related disciplines, and should see research with nonhuman primate models of SIV and HIV as important to their career goals. Experience in primate research is desirable but not essential. Primary criteria are a history of excellence and promise of continued research performance of the highest standard.

As a tenure-eligible faculty member in Pathobiology, the appointee will participate in departmental activities, including teaching, research, and directing graduate students and fellows. As a Core Staff Scientist at the Primate Center, the individual will do research on nonhuman primates.

The Primate Center offers several resources for immunodeficiency research including BSL-3 animal housing, breeding colonies of pigtailed macaques, and immunologic typing based on macaque major histocompatibility antigens. The appointee will be able to interact with investigators involved in independent studies of AIDS pathogenesis, opportunistic infections, vaccines, and antiviral agents in macaque models.

Candidates with Ph.D. or equivalent should send a letter of application, curriculum vitae, and names of four professional references by May 31, 1993, to: **Dr. Douglas M. Bowden, Chairman, AIDS Search Committee, Regional Primate Research Center, SJ-50, University of Washington, Seattle, WA 98195; Telephone: 206-543-1430.** *UW is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**BIOLOGIST.** Applications are invited for a position in zoology at the level of **ASSISTANT PROFESSOR**. Applicants should be able to teach invertebrate zoology and introductory-level biology. Broad training in biology with expertise in developmental biology, vertebrate field zoology, or scanning electron microscopy; appreciation for the liberal arts tradition in education; and a commitment to research involving undergraduates are all highly desirable. The initial appointment may be for one year or as tenure-track, and applicants should specify if they would like to be considered for only one of these. The College, with an enrollment of 1100, has a highly selective program for undergraduates and is located on a forested 10,000 acre tract on the Cumberland Plateau of middle Tennessee. Screening of applicants will begin on April 25, 1993, but applications will be accepted until suitable candidates are found. Send letter of application, curriculum vitae, transcripts, and three letters of reference to: **Dr. Larry Jones, Biology Department, The University of the South, Sewanee, TN 37375.** *Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### FACULTY POSITION MOLECULAR NUTRITION SCIENTIST

The Department of Nutrition and Food Sciences at Utah State University (USU) seeks applicants for a tenure-track position at the **ASSOCIATE PROFESSOR** level or above with 30% teaching and 70% research responsibilities. The position requires a research emphasis in cellular and molecular mechanisms of nutrition, teaching experience in upper-division nutrition or molecular biology courses, a strong research track record in biochemistry, immunology, endocrinology and/or molecular genetics, and a Ph.D. in Nutrition Sciences or related field. Proficiency in the application of fundamental techniques and concepts of biotechnology, immunology, protein chemistry, and demonstration of collaborative endeavors is desired. This position offers an opportunity for collaboration with other Utah State faculty including nutritionists, food scientists, microbiologists, biologists, biochemists, and geneticists. A letter of application, professional curriculum vitae, and names and addresses of five persons who may be contacted for references should be sent to: **Bart Weimer, Ph.D., Chairperson Search/Screening Committee, Department of Nutrition and Food Sciences, Utah State University, Logan, UT 84322-8700; Telephone: (801) 750-3356; FAX: (801) 750-2379.** Review of applications will begin May 31, 1993, and continue until a suitable candidate is found.

*USU IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.*

### DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Applications are invited for a biochemistry tenure-track position in the Department of Chemistry and Biochemistry at the level of **ASSISTANT PROFESSOR**, beginning August 1, 1993. Consideration will be given to candidates in any area of modern biochemistry, cell biology or molecular biology who have a good research background. The successful candidate will be required to establish a research programme that will attract external funding, and to teach biochemistry or cell biology at both the undergraduate and graduate level. This individual will be part of a group that includes faculty from both the Department of Chemistry and Biochemistry and the Department of Biology, who have active research programmes and teach in the undergraduate and graduate programmes. Concordia University is an English-speaking university located in downtown Montreal, in proximity to three other universities, several pharmaceutical companies and the NRC Biotechnology Research Institute. *In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Concordia University is committed to Employment Equity and encourages applications from women, aboriginal peoples, visible minorities and disabled persons.* The closing date for applications is May 14, 1993. Three letters of reference and applications, including curriculum vitae and statement of research interests, should be sent to: **Dr. Paul Joyce, Department of Chemistry and Biochemistry, Concordia University, 1455 de Maisonneuve Boulevard, West, Montreal, Quebec, H3G 1M8.**



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## Postdoctoral Research Fellow

A Ph.D. in Molecular Biology, Cell Biology or Biochemistry is required for this Postdoctoral position in our Inflammation Department. Areas of research include investigating molecular mechanisms of leukocyte trafficking and activation. Experience with recombinant DNA technology and characterization of ligand-receptor interactions is preferred. If you're interested in this position, please submit a CV and a short statement of research interests. (Job Code OA-SC-JC-001)

## Scientific Programmer

Candidate will provide programming support for the Research staff focusing on scientific data acquisition and analysis, customization of existing scientific software, and development of new applications. A BS in Life Science, or a BS in Computer Science with experience in biochemistry or life science, coupled with 3-5 years programming experience in Fortran and C required. Experience in an academic or research environment, as well as familiarity with UNIX, VMS, PC DOS and Mac OS preferred. Excellent communication skills essential. If you're interested in this position, please submit your resume. (Job Code OA-SC-JC-002)

At Amgen, we invest our employees with the freedom to manage their affairs, regulate the quality of work, and make decisions within company goals. And we back this freedom with meaningful challenge and responsibility, as well as a compensation and benefits package that reflects the level of our commitment. If you're interested in either of the above positions, please submit appropriate information, for confidential consideration, to: **Amgen Inc., Staffing, Job Code (See Above), Amgen Center, Thousand Oaks, CA 91320-1789.**

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## OSTEOPOROSIS DRUG RESEARCH AND DEVELOPMENT

NPS Pharmaceuticals, Inc. combines a novel focus on calcium-related drug targets with a nontraditional program in discovery of natural product drug leads. NPS has developed unique multidisciplinary therapeutic programs based on the pharmacology and the pathophysiology of the calcium-dependent mechanisms that regulate cell function. The company has built a significant library of novel compounds as well as identified lead compounds for its programs in central nervous system disorders and in bone and mineral-related diseases. NPS has a well-established team of scientists working on a novel therapy for hyperparathyroidism. The company is now expanding its program in osteoporosis.

The therapeutic program in osteoporosis is based on compounds that target novel receptors on parathyroid cells, osteoclasts, and C-cells. As part of this expansion, we are inviting applications from those with technical expertise in assessing bodily calcium metabolism. Both senior (Ph.D.) and associate (M.S., B.S.) research positions are available as are postdoctoral appointments.

We are particularly interested in candidates who have experience in assessing, either *in vitro* or *in vivo*, bone resorption and turnover. Those specializing in the biology of the osteoclast are especially encouraged to apply.

If you have a desire to make a large impact in a growing company, we would like to hear from you. NPS is located in the University of Utah Research Park at the foot of the Wasatch mountains. We offer competitive salaries, comprehensive benefits, and a stimulating atmosphere in which to do important work. Please send your resume to: **Director of Personnel, Reference #OST393, NPS Pharmaceuticals, Inc., 420 Chipeta Way, Salt Lake City, UT 84108.** No phone calls or agency referrals. NPS Pharmaceuticals, Inc. is an Equal Opportunity Employer.



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## RESEARCH CHEMIST

Research Chemist with training or experience in toxicology to join investigator staff of the Inhalation Toxicology Research Institute, operated by the Lovelace Biomedical and Environmental Research Institute for the Department of Energy. Doctoral degree or equivalent scientific credentials in Chemistry or related field with postdoctoral experience, preferably including training in toxicology, along with strong publication record. Strong analytical chemistry skills required.

Initial assignment will include research on the identification and quantitation of chemical metabolites and the products of their interactions with macromolecules in the body. The successful candidate will be expected to act as both an independent and collaborative investigator in team research efforts, and provide chemical expertise to diverse research projects.

The Institute offers a highly interactive, multidisciplinary team environment and an opportunity to work and live in the beautiful Southwest. Please send resume and salary requirements to the **Human Resources Unit, Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, New Mexico 87185. Refer to Job #119. AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.**

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## **CENTER FOR INTERNATIONAL FORESTRY RESEARCH (CIFOR)**

### **Outstanding Opportunities in Tropical Forest Sciences**

The Center for International Forestry Research (CIFOR) is a new non-profit, autonomous, scientific research organisation with headquarters at Bogor in Indonesia. CIFOR is a focal point for strategic forestry research in the pan-tropics of the developing world and is one of 18 international agricultural research centres supported by the Consultative Group on International Agricultural Research (CGIAR).

Applications are invited for international staff positions, to be filled as soon as possible in order to implement both the 1993 programme and the medium-term plan which is currently being developed. Staff are sought for the following programme areas:

- **social sciences, economics, policy analysis and development;**
- **conservation and management of natural forests;**
- **rehabilitation of degraded and depleted forest lands;**
- **utilization and marketing of forest goods and services;**
- **research support, information services, development of human and institutional resources.**

In addition, CIFOR will be recruiting for a number of other research positions in the next 12 months.

Applicants should possess (1) a PhD or equivalent research qualification followed by a distinguished record of research in tropical forest sciences or related subjects, and (2) experience of living and working in developing countries. Applicants should have demonstrated ability to develop functional collaborative research partnerships with national research institutions in both developed and developing countries.

All positions require substantial travel. Applicants should have an ability to work with people of different cultures and nationalities. They must have good communications skills and be able to represent CIFOR effectively to national research services, officials of governments, donor agencies and other international organizations.

Excellent knowledge of spoken and written English is essential for all positions. Applicants should have a working knowledge of either French or Spanish, preferably both. Knowledge of Bahasa Indonesia would be an advantage.

Appointments will be initially for periods of 2-3 years with a probability of extension. Salary and related benefits are free of local taxes for expatriates, and commensurate with comparable international organizations.

Applicants should send their curriculum vitae, a narrative of their suitability for one of the above positions, date of availability, and names of three referees (including telephone, telex or fax numbers, if available) to Jeffrey Sayer, Director General of CIFOR (Jalan Gunung Batu 5, P.O. Box 161, Bogor 16001, Indonesia). Acknowledgement of receipt of applications and further information about job responsibilities and terms and conditions of employment will be sent only to suitably qualified applicants.

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## POSITIONS OPEN

### FACULTY POSITIONS NEUROSCIENCE AND ANATOMY

The Department of Neuroscience and Anatomy of the Pennsylvania State University College of Medicine, the Milton S. Hershey Medical Center, has tenure-track **ASSISTANT PROFESSOR** positions for the current and forthcoming academic years. Qualified individuals should have a Ph.D. or M.D. degree, postdoctoral training, and research interests in areas of developmental neurobiology, molecular neurobiology, neuroanatomy, or cellular electrophysiology. More experienced individuals may also be considered for **ASSOCIATE PROFESSOR** positions. Appointed faculty are expected to maintain an active research program and participate in departmental teaching. Interested persons should send curriculum vitae, a statement of research interests, and names of three referees to: **Dr. Robert J. Milner, Professor and Chair, Department of Neuroscience and Anatomy, The Milton S. Hershey Medical Center, P.O. Box 850, Hershey, PA 17033.** Deadline for applications is May 15, 1993. *The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### ASSISTANT/ASSOCIATE PROFESSOR IMMUNOLOGIST

Department of Laboratory Medicine and  
Program in Biological Sciences  
University of California, San Francisco (UCSF)

The UCSF Department of Laboratory Medicine invites applications for Director of the Immunology Section of the Clinical Laboratories at the rank of **ASSISTANT/ASSOCIATE PROFESSOR-IN-RESIDENCE**. The successful candidate is expected to supervise the operation of the Clinical Immunology Laboratory, establish an independent, externally funded research program, and teach residents, fellows and students. Joint appointment in the UCSF Program in Biological Sciences will be considered. Please send curriculum vitae, a brief statement of research interests and the names of references to: **Theodore Kurtz, M.D., Immunology Search Committee, Department of Laboratory Medicine, University of California Medical Center, Box 0134, San Francisco, CA 94143.** UCSF is an Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSISTANT PROFESSOR** position available in the area of growth factor signaling in hepatocytes. Candidates should have previous independent grant support. Please send curriculum vitae, summary of research interests and arrange for 3 letters of recommendation to be sent to: **Ms. Ruth Keris, Staff Assistant, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, PA 19104-6059** by 14 May 1993. *Affirmative Action/Equal Opportunity Employer.*

The Applied Mechanics Division of the Mechanical Engineering Department of Stanford University announces an opening for a tenure-line faculty position at the **ASSISTANT PROFESSOR** level. The successful applicant is expected to have a background in and a commitment to basic research in biomechanics or bioengineering possibly including, but not limited to, the areas of cardiovascular, sports, or connective tissue biomechanics, and the analysis and interpretation of modern diagnostic imaging methods. Candidates should have strong teaching interests and skills in the mechanics of deformable solids including elasticity, inelasticity, continuum mechanics, and wave propagation. *Stanford University is an Equal Opportunity/Affirmative Action Employer and especially encourages applications from interested minority and female candidates.* Applicants should submit a current résumé containing a list of publications and names of references to: **Professor C. R. Steele, Chairman, Search Committee, Division of Applied Mechanics, Durand Building, Stanford University, Stanford, CA 94305-4040.**

**ASSISTANT PROFESSOR** of Biochemistry. Full-time, starting 1 July 1993. Ph.D. in Biochemistry required, medical school teaching experience preferred. Duties include teaching students of medicine, pharmacy and optometry. Send curriculum vitae and three letters of reference, by 15 May 1993, to: **Edye E. Groseclose, Ph.D., Department of Biochemistry, Southeastern University of the Health Sciences, 1750 N. E. 167th Street, North Miami Beach, FL 33162-3017.**

## POSITIONS OPEN

**ASSISTANT PROFESSOR.** The Department of Microbiology and Immunology invites applicants for a 12-month, tenure-track position at the assistant professor level in the area of molecular immunology. The successful candidate should have a strong background in molecular biology as well as in immunology. The individual will be expected to develop an independent research program and participate in teaching activities within the department graduate program and medical student teaching program. Recruited faculty will be given competitive start-up funds and laboratory space in a newly finished Biomedical Research Building which will house the Department of Microbiology and Immunology. The applicant must have a Ph.D. or M.D. with postdoctoral experience. Salary is commensurate with experience and a generous fringe benefit package is provided. The position is available September 1, 1993. Address inquiries with curriculum vitae, statement of research interest, and the names of 3 references to: **Roger G. Rank, Ph.D., Department of Microbiology and Immunology, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205.** *The University of Arkansas for Medical Sciences is an Equal Opportunity Employer.*

### OREGON GRADUATE INSTITUTE FACULTY POSITION

Applications invited for positions in the Department of Chemical and Biological Sciences at the **ASSOCIATE** or **FULL PROFESSOR** level. We seek an individual with primary interests in regulation of membrane transport proteins. Candidates should have a strong research funding history. Applications should include curriculum vitae with publication list, a statement of research plans, and arrange for three letters of recommendation to be sent to: **Dr. Keith Garlid, Department Head, Department of Chemical and Biological Sciences, Oregon Graduate Institute of Science and Technology, 20000 N.W. Walker Road, P.O. Box 91000, Portland, OR 97291-1000.** *Equal Opportunity Employer.*

### ECOLOGICAL/ENVIRONMENTAL SCIENCE

The University of North Carolina at Asheville (UNCA) invites applications for a tenure-track **ASSISTANT PROFESSOR** to begin August 15, 1993. We seek candidates with strong commitment to undergraduate teaching and research in the areas of basic and applied ecology. Teaching responsibilities will include ecology courses as well as other undergraduate environmental science courses such as Introductory Air Pollution or Environmental Policy. Ph.D. in ecology or related area required. Submit curriculum vitae, official transcripts, statement of research and teaching philosophy, reprints, and three letters of reference by May 20, 1993, to: **Dr. Gary Miller, Environmental Studies Program, UNC-Asheville, Asheville, NC 28804, Telephone: (704) 251-6441.** *UNCA is an Affirmative Action/Equal Opportunity Employer.*

**RESEARCH ASSISTANT PROFESSOR.** Position is immediately available to work with molecular biology of nuclear retinoid receptors. A doctorate in an appropriate field with experience in molecular biology, e.g., cloning, Northern blots, recombinant DNA techniques, characterization of DNA-binding proteins and cell culture is desirable. Location is very desirable intermountain city. Send résumé and three references before May 15, 1993, to: **Dr. R. P. Sharma, Toxicology Program, Utah State University, Logan, UT 84322-5600.** *Equal Opportunity/Affirmative Action Employer.*

### PHYSIOLOGIST

Cleveland Chiropractic College, serving greater Los Angeles, is accepting applications and nominations for a full-time faculty position. The successful candidate will have an earned Ph.D. in (human) physiology, evidence of at least five years of successful college teaching experience, and scholarly activities. Position will involve both teaching and administrative duties related to program development. The professional program consists of 5 academic years after a minimum of two years of preprofessional work.

Annual salary will be based on the range for an **ASSOCIATE PROFESSOR**, with a full-time 12-month position commencing May or September 1993. Submit a letter of interest, complete curriculum vitae and the names and addresses of at least three references: **Attention Kay Hill, Cleveland Chiropractic College, 590 North Vermont Avenue, Los Angeles, CA 90004.**

## POSITIONS OPEN

**ANIMAL CELL BIOLOGY/PHYSIOLOGY.** One-year position at **ASSISTANT PROFESSOR** level. Responsibilities include team teaching introductory biology and core cell biology course, teaching advanced course in some aspect of cell biology, and supervision of student research. *Mount Holyoke College, a liberal arts college for women, seeks to foster multicultural awareness in the entire community and is an Affirmative Action/Equal Opportunity Employer.* Send statement of teaching and research interest, curriculum vitae, recent reprints, list of relevant courses, and arrange to have three letters of recommendation sent by May 7, 1993, to: **Dr. Sue Ellen Gruber, Department of Biological Science, Mount Holyoke College, South Hadley, MA 01075.** FAX: 413-538-2327; E mail [segruber@MHC.mtholyoke.edu](mailto:segruber@MHC.mtholyoke.edu).

### ASSISTANT/ASSOCIATE PROFESSOR

**ANATOMICAL SCIENCES.** Applications are invited for a tenure-track appointment as an Assistant/Associate Professor in the Department of Anatomy, College of Veterinary Medicine, Cornell University. Candidates must have a strong background in the morphological sciences and a productive research program. Collaborative opportunities exist, including programs in cancer biology, exercise physiology, reproduction biology, molecular biology, animal genetics and development, biomechanics and clinical sciences. New TEM/SEM/LM and image analysis facilities are available. Candidates should have previous teaching experience in the morphological sciences and commitment to teaching in our veterinary anatomy curriculum. Ph.D. Degree is required; D.V.M. and postdoctoral experience are desirable. Send curriculum vitae, description of teaching and research accomplishments and goals, and names of four references to: **Dr. Cornelia Farnum, Department of Anatomy, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401.** Deadline is July 1, 1993; starting date: January 1994. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

### EDUCATION

#### TWO TENURE-TRACK FACULTY POSITIONS IN BIOLOGY UNIVERSITY OF DELAWARE

Position I. **ASSISTANT PROFESSOR** in **CELL BIOLOGY.** Preference will be given to applicants with research experience in the biology of membrane receptors. Teaching responsibilities include a course in molecular or cell biology, and an advanced course in her/his specialty.

Position II. **ASSISTANT** or **ASSOCIATE PROFESSOR** in **CELL PHYSIOLOGY.** Preference will be given to applicants with research experience in membrane ion transport. Teaching responsibilities include being coordinator of and teaching half of a two-semester course in human physiology for advanced undergraduates, and an advanced course of her/his own design.

The successful candidates will be expected to develop fundable research programs with broad evolutionary perspectives and using cellular/molecular approaches. Candidates must have a Ph.D., at least two years of postdoctoral experience and complement existing faculty research strengths. Applicants should submit by May 7, 1993, a cover letter indicating position desired, curriculum vitae, three letters of recommendation, copies of key reprints, present and future research plans, and teaching experience and philosophy to: **Chairperson, Search Committee, School of Life and Health Sciences, University of Delaware, Newark, DE 19716; Telephone: (302) 831-6977, FAX: (302) 831-2281.**

*The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from minority group members and women.*

### ASSISTANT/ASSOCIATE PROFESSOR VERTEBRATE/WILDLIFE ECOLOGY

Applicants should have a Ph.D., publications, teaching experience and commitment to integrating theoretical and applied aspects of ecology, conservation and management. Send a letter, curriculum vitae, appropriate reprints, statements of teaching philosophy and research interests, and the names of at least 3 references by 15 June 1993 to: **Dr. J.M. Packard, Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843-2258.** *TAMU is an Affirmative Action/Equal Opportunity Employer and welcomes applications from qualified women and minorities.*



# ***Delivering on the promise of biotechnology...***



**Immunex Corporation, a leading biotechnology company focused on the discovery, development, manufacture and marketing of products to treat cancer and autoimmune disease, has a number of positions open as a result of an expansion in our development activities. We are recruiting for the following positions in our**

## **Process Development Group:**

### **DIRECTOR** **Drug Delivery/Formulation**

The successful candidate will have 5-10 years experience in Biopharmaceuticals, with extensive knowledge of regulatory, manufacturing and clinical requirements for new drug formulations and delivery systems. A strong background in protein chemistry or analytical biochemistry is required. Responsibilities include: the development of liquid and lyophilized formulations for protein therapeutics, sustained release formulations, accelerated stability studies, and pulmonary delivery of proteins. (#1495344)

### **STAFF SCIENTISTS** **Analytical Biochemistry**

We require two scientists who will develop rapid, high resolution methods for in-process monitoring of clinical fermentation and purification processes. Responsibilities will also include methods development for product characterization and quality control analyses. The successful candidates will pursue novel approaches and apply conventional techniques for quantitative analysis and characterization of both peptide and carbohydrate components of microbial and mammalian cell derived proteins. Experience with protein purification, mass spectrometry and immunological assays is desirable. (#7215341)

### **Mammalian Cell Development - Biochemical Engineer**

The primary responsibility of this person will be the development of cell culture processes for the manufacture of human therapeutics. All aspects of process development will be addressed including process format, bioreactor design and process optimization. This person will also work closely with operations personnel in the transfer and implementation of manufacturing processes and will troubleshoot existing processes when necessary. Essential skills include a fundamental knowledge of engineering principles as they apply to the development of large-scale mammalian cell culture processes. Familiarity with statistical methods of experimental design and data analysis will be important. The successful candidate will also possess a general knowledge of bioreactor design and control instrumentation and will be expected to provide input into future equipment and facility design. Experience working with a variety of mammalian cell lines and some understanding of cell biology and cell physiology will be very beneficial. Scientists with a Ph.D. in chemical or biochemical engineering are encouraged to apply. (#7215346)

### **Formulation**

The successful candidate will be responsible for designing stability studies to test the functional and chemical integrity of new therapeutic proteins and assist biologists and clinicians in evaluating new drug delivery systems. The project will include liquid formulation development and pulmonary delivery (powder or aerosol) for a variety of recombinant proteins. Experience with sustained release formulations, spray drying and lyophilization is desirable. (#7215344)

Staff Scientists candidates should hold a Ph.D. degree and possess significant postdoctoral experience demonstrating independent research skill and creativity and will have demonstrated an ability to work in a collaborative environment.

Immunex Corporation offers a fast-paced, stimulating environment, a competitive salary and an excellent benefits package. We are located in downtown Seattle, in full view of Puget Sound and the Olympic Mountains, close to many recreational and cultural activities. For consideration, please send or fax your C.V., names of three references and a list of publications to the following address and specify the appropriate job number:

**IMMUNEX CORPORATION, Attn: Human Resources**  
**51 University Street, Seattle, WA 98101, Fax: (206) 623-4572.**

**For information on current opportunities at IMMUNEX ,**  
**call our Job Line: 206•389•4060**

**IMMUNEX®**

Equal Opportunity Employer.



## POSITIONS OPEN

**Biology/Environmental Science: ASSISTANT PROFESSOR.** The Department of Science at Webster University invites applications for a tenure-track position beginning fall 1993. Ph.D. in botanical ecology, strong background or emphasis in environmental science, and teaching experience required. A strong commitment to undergraduate teaching is essential. Duties include teaching botanical ecology, plant physiology, and a variety of courses in the environmental sciences. Candidate will help develop and coordinate a new program in environmental science/studies. Review of applications will begin April 15, 1993, and will continue until the position is filled. Letter of application, with supporting materials, should be sent to: **Dr. Gary Coffman, Chair, Department of Science, Webster University, 470 East Lockwood, St. Louis, MO 63119.**

### GENETICIST

**TENURE-TRACK POSITION, ASSISTANT PROFESSOR LEVEL,** beginning August 1993, to teach undergraduate courses in genetics and/or introductory biology courses. A strong commitment to teaching excellence and involvement of students in research is required. Ph.D. in Genetics or a closely related field, bilingual (fluent in Spanish/English). Submit curriculum vitae, statement of teaching and research interests, and three letters of recommendation by May 15, 1993, to: **Dr. Carmen Umperre, Chairperson, Biology Department, University of Puerto Rico, Cayey, PR 00736.** UPR is an Equal Opportunity/Affirmative Action Employer.

### DIRECTOR

#### RETROVIRAL RESEARCH LABORATORY

Faculty position (ASSISTANT/ASSOCIATE RESEARCHER or ASSISTANT/ASSOCIATE PROFESSOR), federal funds, 11-month, non-tenure-track, Research Centers in Minority Institutions Program, Pacific Biomedical Research Center, University of Hawaii, beginning July 1993. Incumbent will establish and direct a research and diagnostic laboratory as part of a multidisciplinary retroviral research program studying patients with HIV infection, and develop an extramurally fundable research program in basic or clinical aspects of HIV in collaboration with Hawaii AIDS Clinical Trials Unit. Medically qualified candidates will be expected to participate in medical teaching related to clinical care. Candidates must have an M.D. degree with eligibility for the American Board of Infectious Diseases or a Ph.D. in a biological science and at least two years of laboratory experience with HIV. Knowledge and experience with cell culture, quantitative HIV culture, PCR, ELISA and blotting techniques are required. Previous experience with AIDS Clinical Trials Groups and immuno flow cytometry is desirable. Appointment level and salary will be based on qualifications and experience in accordance with university scales. Submit curriculum vitae and the names of three references by May 21, 1993, to: **Margo Heath-Chiozzi, M.D., Hawaii AIDS Research Consortium, Leahi Hospital, 3675 Kilaua Avenue, Honolulu, HI 96816; Telephone: (808) 737-2751.** The University of Hawaii is an Equal Opportunity/Affirmative Action Institution. Women and minority candidates are encouraged to apply.

**CHIEF OF PATHOLOGY AND LABORATORY MEDICINE**—The Department of Pathology of the Northwestern University Medical School invites candidates for Chief of Pathology and Laboratory Medicine at the Veterans Affairs Lakeside Medical Center, Chicago, Illinois. The VA Lakeside Medical Center is a major 350-bed service, teaching, and research facility located on the Chicago campus of Northwestern University. Full anatomic and clinical pathology support is provided for hospital and outpatient clinical programs. Candidates must have board certification in anatomic and/or clinical pathology, and subspecialty training is desirable. Preference will be given to candidates with substantial scholarship and experience in contemporary techniques of immunological and/or molecular diagnosis. Candidates should have a strong academic background and commitment to research with qualifications for appointment at the level of **ASSOCIATE PROFESSOR/PROFESSOR.** Salary is commensurate with experience. Interested candidates are requested to send curriculum vitae and three references no later than May 15, 1993, to: **Janardan K. Reddy, M.D., Professor and Chairman, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008.**

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.

## POSITIONS OPEN

### CORNELL UNIVERSITY

**FACULTY POSITION.** Cornell University's Division of Nutritional Sciences invites applications for tenure-track position; **ASSISTANT PROFESSOR** (preferred); 35% teaching; 65% research. Nutritional Aspects of Molecular/Cellular Biology/Mammalian Biochemistry. Successful candidate expected to: develop strong research program in nutrition suitable for training graduate students; to attract external funding to support this research program; and to participate in Division's undergraduate and graduate teaching program. Research programs with relevance to nutritional issues at the molecular, cellular, or organismal level sought. Ph.D. or M.D. or equivalent doctoral degree, must have postdoctoral experience and demonstrate potential for outstanding accomplishments in research and teaching. Position available January 1, 1994. Rank and competitive salary commensurate with background and experience. Attractive benefits available. Qualified applicants should submit curriculum vitae, list of publications, statement of research and teaching interests, and names/addresses of three references to: **Dr. Kathleen M. Rasmussen, Search Committee Chair, Division of Nutritional Sciences, Cornell University, 111 Savage Hall, Ithaca, NY 14853-6301.** Screening of applicants begins June 1, 1993, and will continue until position filled. Affirmative Action/Equal Opportunity Employer.

### FACULTY POSITION

#### The Department of Biochemistry UMDNJ—Robert Wood Johnson Medical School

The Department of Biochemistry at the University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Candidates should have a Ph.D., M.D., or equivalent, postdoctoral training and significant research accomplishments in molecular biology, biochemistry, cellular or developmental biology. Successful candidates should establish a vigorous research program, in addition to teaching medical and graduate students. Send curriculum vitae, reprints, a statement of research accomplishments and plans, and arrange to have 3 to 4 letters sent to: **Dr. Masayori Inouye, Department of Biochemistry, UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635.**

UMDNJ, New Jersey's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.



### FACULTY POSITIONS

#### Department of Biological Sciences University of Massachusetts, Lowell

The Department of Biological Sciences invites applications for two tenure-track positions at the level of **ASSISTANT or ASSOCIATE PROFESSOR.** One will be filled by an **Immunologist** with a background in molecular biology and protein chemistry as well as some experience with techniques such as: antibody engineering, monoclonal antibody production, lymphocyte culture, and/or transgenics. The second position is for a **Eukaryotic Molecular/Cell Biologist** with experience in the area of gene expression. Applicants should have postdoctoral experience and a good publication record. The successful candidates will develop a research program, seek extramural funding and will be encouraged to participate in activities of the University's newly established Massachusetts Bioprocessing Center. A commitment to teaching in the Department's undergraduate and graduate programs (M.S. in Biology/Biotechnology, Ph.D. in Biochemistry), as well as the directing of graduate student research, are expected.

Interested individuals should submit curriculum vitae, reprints of three relevant publications, a statement of research interests as well as names, addresses and telephone/FAX numbers of at least three references. Starting date is September 1993; application deadline: May 28, 1993. All correspondence should be sent to: **Dr. Robert D. Lynch, Chairman, Department of Biological Sciences, University of Massachusetts, Lowell, 1 University Avenue, Lowell MA 01854.** Telephone: (508) 934-2870, FAX: (508) 934-3003. Position is contingent upon funding. The University of Lowell is an Equal Opportunity/Affirmative Action, Title IX, 504 Employer.

## POSITIONS OPEN

### CHAIR

#### Department of Biochemistry and Molecular Biology University of Nebraska College of Medicine

Applications and nominations are invited for the position of Professor and Chair of the Department of Biochemistry and Molecular Biology. We seek a person to give scientific, academic and administrative leadership to all aspects of the department's activities. The new chair will have the opportunity to recruit additional faculty and develop new programs. Applications should include curriculum vitae and the names, addresses, and telephone numbers of three or more references. Application deadline is May 31, 1993. Send information to: **Thomas H. Rosenquist, Ph.D., Chairman, Biochemistry and Molecular Biology Search Committee, c/o Dean's Office, University of Nebraska College of Medicine, 600 South 42nd Street, Omaha, NE 68198-6545.** The University of Nebraska is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

**MOLECULAR BIOLOGIST/CELL BIOLOGIST.** The Specialized Center of Research on Arteriosclerosis in the Department of Medicine at the University of California, San Diego, seeks qualified Ph.D. candidates for an **ASSISTANT PROFESSOR IN RESIDENCE.** Previous experience in transgenic mouse research desirable. Will join a program directed at identifying genes involved in the atherogenic process. Salary commensurate with experience and based on established UCSD salary scales. Submit curriculum vitae and names and addresses of 3 references by May 21, 1993, to: **Daniel Steinberg, M.D., Ph.D., Director, Specialized Center of Research on Arteriosclerosis, University of California, San Diego, Department of Medicine (0682), La Jolla, CA 92039-0682.** Affirmative Action/Equal Opportunity Employer.

**LECTURERS, Department of Applied Biology and Chemical Technology, Hong Kong Polytechnic.** Applications are invited for Lecturers in the following areas: (1) Microbiology/Genetics; (2) Plant/Animal Physiology; (3) Biotechnology. A relevant Ph.D. degree is normally required. Working or teaching experience in the related applied biology areas would be an advantage. Candidates may be appointed to a post in the College of Degree Studies (CDS) on the University salary scales or to a post on the Polytechnic salary scales, depending on the vacancies available. Candidates appointed to the CDS will be deployed primarily in degree-level work. Salaries: (US\$1 = HK\$7.735 as of 29 March 1993). **UNIVERSITY LECTURER** (on University salary scale): HK\$343,680 to \$389,880 per annum/bar/HK\$413,040 to \$574,140 per annum; **LECTURER** (on Polytechnic scale): HK\$237,120 to \$409,140 per annum. **Conditions of Service:** Initial appointments will be on a gratuity-bearing fixed-term contract of two years. Continuation thereafter is subject to mutual agreement. Other benefits include leave, medical and dental schemes, children's education allowance and subsidized housing where appropriate. **Applications:** Send curriculum vitae and names of three referees to: **General Secretary, Hong Kong Polytechnic, Hung Hom, Kowloon, Hong Kong before 7 May 1993 [FAX: (852) 3642166] or Email: BITNET HKPOLY@HKPCC.HKP.HK.** Further information will be provided upon request from the same office.

### INVERTEBRATE ZOOLOGIST DEPARTMENT OF ORGANISMIC AND EVOLUTIONARY BIOLOGY

#### HARVARD UNIVERSITY

The Department seeks a broadly based invertebrate zoologist whose work addresses the organismic and evolutionary biology of living invertebrates (exclusive of insects). The appointment will be to a **TENURED PROFESSORSHIP.** We are especially interested in individuals whose research experience and interests extend across phyla. Applicants should submit, by 1 June 1993, curriculum vitae, a statement of research and teaching interests, and the names and address of three references to:

**Professor Farish A. Jenkins, Jr.,  
Chairman, Invertebrate Zoology Search Committee  
Department of Organismic and Evolutionary Biology  
Harvard University  
Cambridge, MA 02138**

Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority groups.



## RESEARCH UPDATE

### Cyanamid Promotes Pioneering Spirit of Top Scientists

Extraordinary growth at the Agricultural Research Division of American Cyanamid Company has created a broad range of opportunities for talented research scientists. Here at our 640-acre campus-like headquarters, just minutes from Princeton University, you'll find a highly supportive community of experienced scientists in an environment where ideas are encouraged and talent is recognized and rewarded. Currently we are seeking individuals with an MS or a BS and three years of laboratory experience to join us in the following areas:

#### Animal Molecular and Cellular Biology

Apply the tools of molecular biology to enhance animal health and performance. Your research will focus on the investigation of structure/function/activity relationships of the involved peptide hormone receptors with emphasis placed on the signal transduction pathway of the growth hormone receptor system. Experience in molecular biology is essential with strong skills in protein biochemistry and knowledge of peptide receptor systems beneficial. Dept. KY

#### Animal Biochemistry

Participate in a program in which biochemical and molecular biology/genetic approaches are used to select novel targets and to design and implement screens that will identify compounds useful in controlling animal parasites. Strong skills in biochemical, genetic and molecular biology techniques are required; knowledge of *C. elegans* biology is helpful. Dept. AE

In addition to our unique interdisciplinary environment, American Cyanamid Company offers a competitive salary and excellent benefits package. For immediate consideration, please forward your resume to: Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08543-0400. An equal opportunity employer.



## Research Food Scientist

The Pfizer Food Science Group has established a goal of becoming the preeminent supplier of high value healthful food ingredients to the worldwide food processing industry. In support of that mission, Pfizer Inc, Central Research Division is expanding its capabilities in food science. Due to an accelerated research program, there is a need to increase our efforts in testing the safety and tolerance of new food additives.

Currently, we are seeking a highly motivated research scientist to be responsible for the management and conduct of the nutritional, metabolic and safety assessment of new food chemical products. You should have a PhD or the equivalent in nutritional toxicology, biochemistry or related field, with emphasis in metabolism, as well as some food industry experience highly desirable.

Our international research-based company uses advanced techniques to generate new products, new areas of revenue and career opportunities that self-directed, talented people will find stimulating and rewarding. The primary R&D facility for Pfizer Inc is located in a southeastern Connecticut shore community, giving easy access to the well known academic and cultural centers of the Northeast and offers the attractions of a New England lifestyle.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, savings and investment plan, pension plan, relocation assistance and more.

To learn how you can be part of the future of Pfizer, send your resume to: **Lorraine C. Corr, Supervisor, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



**Central Research**  
Bringing science to life.

## POSITIONS OPEN

**DEAN, COLLEGE OF PHARMACY, UNIVERSITY OF UTAH.** A distinguished educator/scientist is sought to provide educational, scientific and fiscal leadership for the college. The Dean is the chief administrator of the college, reporting directly to the Vice President for Health Sciences. The College of Pharmacy is research-intensive and committed to excellence in professional and graduate education. Applications will be accepted until June 1, 1993, or until a suitable candidate has been identified. Please send curriculum vitae and names, addresses and telephone numbers of three or more referees to: **Jean K. Devenport, Pharm.D., Chair of the Search Committee, University of Utah College of Pharmacy, Salt Lake City, UT 84112.** *The University of Utah is an Equal Opportunity/Affirmative Action Employer; applications from qualified female/minority candidates are encouraged.*

### ASSOCIATE DIRECTOR OF ANESTHESIA RESEARCH

The Department of Anesthesia at Rush Medical College invites applications for the position of Associate Director of Anesthesia Research. Experience required in large and small animal surgery; computerized data analysis; initiation, supervision and conducting ongoing research. Demonstrated project design and writing skills required. Candidates should possess an advanced degree in the biologic sciences with prior medical research experience. Salary commensurate with qualifications and experience. Send curriculum vitae to:

**Kenneth J. Tuman, M.D.**

**Vice Chairman**

**Department of Anesthesia**

**Rush—Presbyterian—St. Luke's Medical Center**

**1653 West Congress Parkway**

**Chicago, IL 60612**

**Telephone: (312) 942-3135 or FAX: (312) 942-8858**

**CHAIR OF PSYCHIATRY**—The University of California, Davis, School of Medicine is seeking a full-time academic Chairperson of Psychiatry. Candidates must have an M.D. degree or equivalent, be Board Certified in Psychiatry or equivalent, eligible for licensure in California, and be academically qualified for appointment at the Full Professor level. Evidence of excellence in academic administration, teaching, clinical practice, and research is required. Please forward the following: (1) letter describing administrative, teaching, clinical and research background; (2) curriculum vitae, and (3) names and addresses of five references to: **David Richman, M.D., Chair, Search Committee for a Chair of Psychiatry, c/o Karen Eilers, Dean's Office, School of Medicine, Medical Sciences I-C, University of California, Davis, CA 95616.** This position will be "Open Until Filled." Applications will not be accepted after July 31, 1993. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

### CHAIR, DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE UCLA SCHOOL OF MEDICINE

The UCLA School of Medicine is recruiting a **CHAIR** for its Department of Pathology and Laboratory Medicine. She/he will provide leadership for the teaching, clinical, and research programs of the department.

Candidates are requested to submit curriculum vitae to: **Pathology Search Committee, UCLA School of Medicine, Office of the Dean, 12-138 CHS, Los Angeles, CA 90024-1722.**

*UCLA is an Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR BIOLOGIST IMMEDIATE OPENING

Ph.D. and postdoctoral experience in mammalian systems preferred. Background in protein biochemistry valuable. Present research on keratinocyte gene expression. Should be capable of working independently. Assistant professor possible. Send curriculum vitae, 3 letters of recommendation, copies of relevant papers and date available to: **A. Razzak Ahmed, M.D., D.Sc., Center for Blood Research, Harvard Medical School, 800 Huntington Avenue, Boston, MA 02115.**

## POSITIONS OPEN



### MOLECULAR BIOLOGY OF CANCER Memorial Sloan-Kettering Cancer Center

Tenure-track appointments at the **ASSISTANT** and **ASSOCIATE MEMBER** level are available at Memorial Sloan-Kettering Cancer Center for laboratory investigators in the cellular and molecular biology of prostate cancer. Among areas of interest are regulation of growth and differentiation, signal transduction, oncogene activity and suppressor genes/cell cycle regulation. Our focus in these recruitments is especially in the area of genitourinary cancer, particularly prostate cancer. Candidates with M.D. and/or Ph.D. degrees should have a successful record of research achievements and the capacity to establish an independent research program. Attractive start-up packages are available to establish the successful candidates' laboratories. Collaborations with basic and clinically bridging laboratory investigators at the Cancer Center are encouraged. Interested applicants should forward curriculum vitae, bibliography, the names of three references and a research statement to: **Howard Scher, M.D., Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021.** *Memorial Sloan-Kettering Cancer Center is an Equal Opportunity/Affirmative Action Employer.*

**RESEARCH & DEVELOPMENT COORDINATOR.** Prince William Sound Science Center, Cordova, Alaska. Requirements: extensive background in oil spill research and development projects, good writing and organizational skills. Prefer strong academic background, Master's degree or Ph.D. or equivalent experience. Salary: \$40,000 to \$55,000, depending on experience. Detailed position announcement available on request, **FAX: (907) 424-5820 or Telephone: (907) 424-5800.** Position open until filled.

**GEOGRAPHIC INFORMATION SPECIALIST.** Prince William Sound Science Center, Cordova, Alaska. Responsibilities: Maintain and expand GIS database and capabilities at the Center with particular attention to research on oil spill response technologies. Prefer strong academic background, Master's degree or equivalent experience. Prefer experience in using ARC/INFO for natural resource management purposes. Require excellent interpersonal and writing skills; self-starter. Further details available on request: **FAX: (907) 424-5820 or Telephone: (907) 424-5800.** Position open until filled.

### FACULTY POSITIONS IN IMMUNOLOGY DUKE UNIVERSITY MEDICAL CENTER

The newly formed Department of Immunology invites applications for junior- and senior-level tenure-track faculty positions. Candidates working in the broad areas of lymphocyte biology and lymphocyte development are encouraged to apply.

Interested individuals should send curriculum vitae, a statement of research interests, and the names of three references by July 1, 1993, to: **Dr. Michael S. Krangel, Department of Immunology, P.O. Box 3010, Duke University Medical Center, Durham, NC 27710.**

*Duke University Medical Center is an Equal Opportunity/Affirmative Action Employer.*

**HISTOLOGY AND CELL BIOLOGY, EMBRYOLOGY.** The Department of Anatomy of the University of Puerto Rico, Medical Sciences Campus, seeks **TWO VISITING FACULTY** for fall semester, 1993 (beginning August 2): (a) team-taught medical histology and cell biology, and preferably also embryology, rank and salary in accordance with experience and present position, from Instructor to Professor; (b) team-taught medical histology and cell biology, rank of Instructor or Assistant Professor. Second position may become tenure-track. Forward curriculum vitae as soon as possible to: **Dr. John G. H. Cant, Department of Anatomy, G.P.O. Box 365067, San Juan, PR 00936-5067, or Telephone: 809-754-6274.**

## POSITIONS OPEN

**UNIVERSITY OF CALIFORNIA, SAN DIEGO,** with support of a Whitaker Foundation Development Award, seeks **FACULTY** in areas related to tissue engineering. Fields of research include bioengineering of growth and tissue replacement, biomaterials, and molecular and cell biology related to tissue engineering. The candidate is expected to develop a nationally recognized research program which complements the existing strengths in bioengineering, to teach undergraduate and graduate bioengineering courses, and to develop new courses in tissue engineering, biomaterials, numerical methods and/or imaging in bioengineering. Candidate must have doctorate degree, with postdoctoral experience in relevant fields. Salary commensurate with experience and based on UC pay scales. *Underrepresented minorities and women are encouraged to apply.* Send curriculum vitae, statement of research interests and teaching experience, and names/addresses of three references by July 31, 1993, to: **Dr. Shu Chien, Institute for Biomedical Engineering, UCSD, La Jolla, CA 92093-0412.** *UC is an Equal Opportunity/Affirmative Action Employer.*

### BIOLOGICAL SCIENCES INSTRUCTOR

The Department of Natural Sciences, School of Liberal Arts and Sciences, Stephens College, Columbia, Missouri, seeks **BIOLOGICAL SCIENCES INSTRUCTOR** for a nine-month, tenure-track, teaching and advising appointment. Position begins August 1993. Responsibilities include teaching both lecture and lab sections for anatomy and physiology, genetics, and microbiology (alternate year offerings), and each year, sections in biological concepts and natural sciences for non-majors. Advising and research involving undergraduates is expected. Ph.D. required. Strong commitment to women's education essential. Salary commensurate with qualifications and experience. Submit letter of application stating teaching philosophy and professional goals, curriculum vitae, three letters of recommendation and transcripts of all undergraduate and graduate studies to: **Charles Laun, Chair, Biology Search Committee, Campus Box 2072, Department of Natural Sciences, Stephens College, Columbia, MO 65215.** Review of applications will begin April 27, 1993, and will continue until position is filled. *Affirmative Action/Equal Opportunity Employer.*

### TEACHING ASSISTANT IN BIOLOGY

The Department of Organismic and Evolutionary Biology is seeking a full-time Teaching Assistant to organize and supervise laboratories for the introductory organismic biology course and courses on vertebrate physiology and morphology. Appointment for one year, to begin July 1, 1993, with option of renewal up to three years. Ph.D. in Biological Sciences with background to instruct in general biology, especially vertebrate physiology and morphology required. Leadership skills to assist in training graduate student Teaching Fellows and to help manage their relationships with up to 400 undergraduates in the introductory biology course. Knowledge of instrumentation for physiological measurements and data analysis. Overall supervision of the student laboratory sessions, including hiring of teaching fellows to conduct laboratories. The two introductory courses are offered in the Fall Term and the smaller advanced (physiology/morphology) course in the Spring Term.

Send letter of application, curriculum vitae, and names and addresses of three references by May 7, 1993, to: **Teaching Assistant Search, Organismic and Evolutionary Biology, 26 Oxford Street, Cambridge, MA 02138.** *HARVARD UNIVERSITY is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study dynamics of actin in fibroblast locomotion using correlated video microscopy, microinjection of fluorescent cytoskeletal proteins, immunocytochemistry and electron microscopy.

Send curriculum vitae and 3 letters of reference to: **Dr. Julian P. Heath, Baylor College of Medicine, CNRC, 1100 Bates, Houston, TX 77030. (FAX: 713-798-7130).**

**Upjohn**

*The Upjohn Company brings high-quality, innovative health and nutritional products to customers worldwide. As a leader in pharmaceutical R&D, important areas of our research include AIDS and other infectious diseases, as well as neurological, cancer, hypersensitivity, cardiovascular and metabolic diseases. Analytical chemistry, pharmaceuticals, toxicology and metabolism are significant research areas in our development program. It is our reputation for R&D, as well as the attractive lifestyle available in southwestern Michigan, that brings scientists from around the world to our headquarters in Kalamazoo.*

# Striking the Balance at Upjohn

## QUALITY OF LIFE

Kalamazoo provides an outstanding mix of recreational & cultural pursuits, boasting its own symphony orchestra, arts center, museum & planetarium, local theater, sports clubs, public golf courses and more. The area enjoys a reasonable cost of living and housing market, and excellent schools and universities.

Upjohn has worked on its own and with several Kalamazoo agencies to help employees balance the demands of work and family. Special programs include a Child Care Resource & Referral Program; an ElderSource Program for elderly dependents, a "Workable Solutions" program for emergency child care, and flexible work schedules such as job sharing.

## QUALITY OF WORK

Upjohn scientists conduct world-class research in multi-disciplinary teams using state-of-the-art equipment (over 50% of our research facilities are less than 10 years old). Our new, \$122 million, 700,000-square-foot research building (opened 1992) has doubled the size of our Kalamazoo research campus.

Our investment in research as a percentage of sales (\$549 million in 1992) is among the highest in the industry. To ensure a rapid discovery-development cycle, research teams develop multiple analogs of promising chemical classes, conduct worldwide preclinical and clinical trials in parallel, and apply computer technology to hasten regulatory review of NDAs.

Upjohn has a promotion system which recognizes performance, experience and training, and a compensation program which rewards high-caliber employees through merit and cost-of-living increases. Benefits include medical, dental and life insurance coverage, paid vacation & holidays, and matching stock contributions. For more information on current opportunities, please send your resume to **The Upjohn Company, Attn: Corporate Recruiting, 7000 Portage Road, Kalamazoo, MI 49001**. Equal Opportunity Employer.



## TEACHING CONSULTANT IN STATISTICS AND MEASUREMENT IN PSYCHOLOGY (Ref. 92/93-72)

Applications are invited for the post of Teaching Consultant in the Field of Statistics and Measurement in Psychology in the Department of Psychology. The filling of the post is subject to the availability of funds, but it is hoped that an appointment can be made with effect from September 1993. The post is on "local" terms of service, and the appointee will not be entitled to expatriate benefits such as housing, passages and baggage allowances. On reaching point 6 or above of the salary scale, however, the appointee will be eligible to apply for a Private Tenancy Allowance.

Applicants should have a Ph.D. degree, and knowledge of Hong Kong. Fluency in Chinese is preferred. Teaching, consultation and supervising student research will be required.

Annual salary (superannuable) is on a 7-point scale: HK\$250,320 - HK\$389,880 (approx. US\$32,510 - US\$50,630). Starting salary will depend on qualifications and experience.

Further particulars and application forms may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax: (852) 559 2058; E-mail: APPTUNIT@HKUVM1.HKU.HK).

Closes 28 May 1993.

## RESEARCH OPPORTUNITIES ABROAD FOR U.S. BIOMEDICAL SCIENTISTS

### JOHN E. FOGARTY INTERNATIONAL CENTER

For Advanced Study in the Health Sciences  
NATIONAL INSTITUTES OF HEALTH

**Senior International Fellowships:** 3 to 12 months for use in any foreign country. Applicants must be more than 5 years post doc with a permanent position in the U.S.

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**Fogarty International Research Collaboration Award (FIRCA):** 1-3 years; small research grants for equipment, supplies and travel for collaboration between U.S. investigators and scientists in Central and Eastern Europe, former Soviet Union, or Latin America.

For info: International Research & Awards Branch  
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Bldg. 31, Rm. B2C39  
Bethesda, MD 20892  
Tel: (301)496-1653  
Fax: (301)402-0779





## POSITIONS OPEN

### MOLECULAR PARASITOLOGISTS

A SENIOR-LEVEL POSITION and a POSTDOCTORAL POSITION are available in a large, multidisciplinary malaria vaccine development program. Projects involve identification, cloning, and expression of candidate pre-erythrocytic stage malaria vaccine antigens, development of a transfection system for *Plasmodium*, and inhibition of gene expression using antisense oligonucleotides. Candidates should have a strong background in molecular biology. Contact: Dr. Stephen L. Hoffman, Malaria Program, Naval Medical Research Institute, 12300 Washington Avenue, Rockville, MD 20852. Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in the area of Neuropharmacology/Neurotoxicology. Candidate should have a Ph.D. in related field. Preference will be given to applicants with experience in HPLC, RIA and behavioral measurements. Please send curriculum vitae, a brief statement of research experience and interest and the names and telephone numbers of three references to: Dr. Magdi R. Soliman, Department of Basic Pharmaceutical Sciences, College of Pharmacy, Florida A&M University (FAMU), Tallahassee, FL 32307. FAMU is a Historically Black University/Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS beginning July 1993 to develop new fluorescent dyes for labeling nucleic acids and to participate in the development of novel DNA separation and detection techniques for the Human Genome Project. Successful applicants will participate in a collaborative research effort with Drs. R. A. Mathies and A. N. Glazer in the Departments of Chemistry and Molecular and Cell Biology. Experience in synthetic organic chemistry is required; physical biochemistry, and spectroscopy desirable. Send résumé and three references by May 28, 1993, to: Dr. Richard A. Mathies, Department of Chemistry, University of California, Berkeley, CA 94720. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available to conduct studies on (1) mechanism of action of folate-dependent enzymes. Ph.D. or equivalent in Biochemistry or related field and experience with mechanistic studies on folate-dependent enzymes required; or (2) zinc metabolism using isotopes. Ph.D. in Nutrition or related field and experience in research of trace element metabolism. Available June 1, 1993. Submit curriculum vitae and 3 references to: Dr. Barry Shane (1) or Dr. Janet C. King (2), Nutritional Sciences, University of California, Berkeley, CA 94720 by May 16, 1993. Applications submitted after deadline will not be considered. The University of California is an Equal Opportunity/Affirmative Action Employer.

### BIOCHEMIST/IMMUNOCHEMIST

POSTDOCTORAL POSITIONS available to study the molecular structure of bone and cartilage extracellular matrices and to develop novel immunoassays for monitoring tissue metabolism. Experience with monoclonal antibodies, immunochemical methods and protein characterization an advantage. Academic appointment dependent on qualifications.

For further information, please send curriculum vitae, statement of career goals and three references to: Dr. David R. Eyre, Orthopaedic Research Laboratories, RK-10, University of Washington, Seattle, WA 98195. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION: Candidate to work on polyunsaturated fatty acid lipoxigenase and cyclooxygenase expression, regulation, and activation in cultured human epithelial and mesothelial cells. Background in molecular biology is required. Contact: Floyd A. Green, M.D., Department of Medicine and Microbiology, State University of New York at Buffalo, 3495 Bailey Avenue, Buffalo, NY 14215, U.S.A. Kindly enclose curriculum vitae, the names of 3 references, and a brief sketch of research experience. FAX: (716) 838-2363.

## POSITIONS OPEN

### UNIVERSITY OF WISCONSIN

POSTDOCTORAL POSITIONS (two) are available to study protein kinases (PNAS 89; 5222) and phosphoinositide kinases (JBC 265; 18012) regulation of both secretion and cell division. Experience in molecular biology, biochemistry, or cell biology is required. Please send curriculum vitae and names of three references to: Dr. Richard A. Anderson, University of Wisconsin, Department of Pharmacology/Cell and Molecular Biology Program, 3640 Medical Sciences Center, 1300 University Avenue, Madison, WI 53706.

POSTDOCTORAL FELLOWSHIPS in Psycho-neuroimmunology, neuroendocrinology and neuroimmunology at The Ohio State University. An NIMH-supported training grant for basic scientists or clinicians (Ph.D. and/or M.D., D.D.S., D.V.M.) to conduct research on communication among the nervous, endocrine and immune systems is available July 1, 1993. Applicants must be U.S. citizens or permanent residents of the United States. Applicants should submit a letter stating their research interests along with curriculum vitae and the names of three references to: John F. Sheridan, Ph.D., College of Dentistry, Box 192 Postle Hall, The Ohio State University, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

### POSTDOCTORAL FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS available from research grants and an NIH Training Grant in the Department of Physiology for the disciplines in physiology, pharmacology, and biochemistry. Excellent professional training in the following areas: regulation of membrane ion channels, energy transduction by ion pumps and carriers, biochemical requirements for restoring ischemic heart tissue, angiogenesis, mechanisms responsible for depression of heart function in circulatory shock, hormonal regulation of gene transcription, intracellular ionic release in vascular smooth muscle and secretory cells, and molecular mechanisms for endothelium-dependent release of vasoactive substance. Primary duties include laboratory research with some responsibilities for participation in seminars, workshops and teaching. Appointment to NIH Training Grant requires U.S. citizenship or permanent residence. Ph.D., M.D., D.V.M. or equivalent degree required. Environment is conducive to maximum interaction with talented faculty, fellows, and students. Focus is on development of broad skills and knowledge-base essential for the effective scientist communicator as well as acquisition of detailed in-depth expertise required to solve complex biological problems. Competitive salary commensurate with experience. Please send names of three references and curriculum vitae to: Dr. Allan Jones, Chair, Department of Physiology, MA415 Medical Sciences Building, University of Missouri-Columbia, Columbia, MO 65212.

AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER. Minorities and women are encouraged to apply. UM complies with guidelines of the Americans with Disabilities Act of 1990. For ADA related questions or reasonable accommodations, please contact: Dr. Allan Jones, (314) 882-4957.

### POSTDOCTORAL FELLOWSHIPS IN PSYCHIATRIC GENETICS

The Psychiatry Department at the University of Iowa has openings for postdoctoral fellowships in psychiatric genetics. These are NIMH-supported stipends available for up to three years. Projects include studies of the effects of alcohol on transcription of growth factors and neurotransmitters (Dr. Michael Miller); linkage studies of anxiety disorders and schizophrenia (Dr. Raymond Crowe); and cloning and mapping studies of brain enzymes and neurotransmitters (Dr. Eric Devor).

For more information write to: Dr. Raymond R. Crowe, Department of Psychiatry, UIHC, 200 Hawkins Drive #2887 JPP, Iowa City, IA 52242-1057. The University of Iowa is an Affirmative Action/Equal Opportunity Employer; women and minorities are encouraged to apply.

## POSITIONS OPEN

### POSTDOCTORAL TRAINING IN HUMAN BEHAVIORAL NEUROIMAGING

Postdoctoral training is offered in applications of advanced imaging techniques to human behavioral neuroscience. Synergistic application of multiple imaging methods is emphasized. On-site techniques include positron-emission tomography, magnetic resonance imaging (functional and anatomical), *in vivo* localized magnetic resonance spectroscopy, and event-related electrical potentials. Functional mapping of the human brain is strongly emphasized.

Several 2-year training positions are available, to begin on or after January 1, 1994. Doctoral degree in basic neuroscience, psychology (experimental, neuro or cognitive), or medicine is required. Applicants with medical degrees must have residency training in neurology, neurosurgery, or psychiatry.

Apply to: Peter T. Fox, M.D., Research Imaging Center, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-6240. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available for research on mapping the antigenic and functional domains of human cytomegalovirus glycoproteins. Work includes gene cloning, transient expression in eukaryotic cells, construction of mutant viruses and transformed cell lines. Preference will be given to applicants with a strong background in molecular biology. Interested candidates should submit curriculum vitae and three letters of reference to: Dr. Lenore Pereira, School of Dentistry, University of California San Francisco, HSW-604, San Francisco, CA 94143-0512. Equal Opportunity/Affirmative Action.

### UNIVERSITY OF FLORIDA BRAIN INSTITUTE SPINAL CORD INJURY RESEARCH GROUP

POSTDOCTORAL POSITIONS are immediately available as part of an NIH- and state of Florida-funded multidisciplinary program focused on spinal cord injury and repair. Areas of interest include fetal tissue transplantation, neuroimmunology, neuroanatomy, molecular biology, neuropharmacology, electrophysiology, tissue culture, and behavior. Applicants must have a Ph.D. or M.D. degree and preference will be given to individuals with a background in neural plasticity research. Send a statement of research interests, the names of three references and curriculum vitae to: Paul J. Reier, Ph.D., Department of Neurosurgery, Box 100265, University of Florida, Gainesville, FL 32610.

POSTDOCTORAL BIOORGANIC/BIOCHEMIST POSITION, Hunter College, City University of New York. Antitumor drug-DNA interactions; characterization of drug-DNA adducts; study of their effects on DNA structure and on the biochemistry of DNA processing and function. Techniques: synthetic oligonucleotides, HPLC, gel electrophoresis, radiolabeled DNA, spectroscopy, molecular modeling, etc. Well-known laboratory in the field. Two to three years, \$25,000 or more, depending on experience. Professor Maria Tomasz, Department of Chemistry, Hunter College, CUNY, New York, NY 10021.

### POSTDOCTORAL FELLOW

Postdoctoral fellow with 1 to 3 years of experience to work on a multidisciplinary project involving lipoproteins/macrophages and lipid peroxidation in women. Molecular biological experience (expression of genes in eukaryotic cells) essential. Experience related to cytokine/growth factors, enzymes involved in lipid peroxidation, antioxidants or *in situ* hybridization techniques preferred. Position available July 1, 1993. Send résumé and names of two references to: Dr. Sampath Parthasarathy, Department of Gynecology and Obstetrics, Emory University School of Medicine; Thomas K. Glenn Memorial Building; 69 Butler Street, S.E.; Atlanta, GA 30303.

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## Research Associate (Immunology)

Candidate must have a BS degree in Biology, Biochemistry or a related field. Responsibilities will include production and characterization of monoclonal antibodies and biological/immunoassay development. A strong knowledge of and experience with Immunology and cell culture is required; minimum two years experience in monoclonal antibody production with some background in protein and immunochemistry preferred. (Job Code 04-Z-225)

## Research Associates (Neuroscience)

Candidates must have a BS/BA degree in Psychology, Neuroscience or Biology. Responsibilities will include stereotaxic rodent surgery, preparation of brain sections for immunohistochemical and in situ hybridization analysis, quantification of probes using computer-assisted image analysis, statistical evaluation and written/oral presentation of results. Candidates will plan experiments and write results for public presentation. A Master's degree and/or three years neuroscience experience in stereotaxic surgery, immunohistochemistry and computer-assisted image analysis is preferred. Neurochemical assay experience and knowledge of neurohistological techniques is highly desirable. HPLC experience and assessment of learning/memory in rodents is advantageous. Computer literacy (DOS preferred) essential. Independence, creativity and leadership will be encouraged. (Job Code 03-Z-238)

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**THE MURDOCH INSTITUTE FOR RESEARCH INTO BIRTH DEFECTS LIMITED  
AND THE  
UNIVERSITY OF MELBOURNE**

**PROFESSOR/DIRECTOR OF THE MURDOCH INSTITUTE**

The Murdoch Institute for Research into Birth Defects and the University of Melbourne seek applications for appointment to the position of Director of the Institute and Professorial Associate with the title of Professor of the University. The basic academic qualification of the appointee may be in either science or medicine.

Applicants should have an international reputation in research relevant to genetic diseases and other causes of birth defects, interpreting these fields of science very broadly. Considerable experience in clinical genetics or proven ability to collaborate well with clinical geneticists is important. Applicants must be able to interact effectively with private and corporate sponsors and with governments and research funding agencies. Experienced administrative support is available.

The Institute (staff of 60), and its subsidiary, the Victorian Clinical Genetics Service (VCGS) (staff of 30), are closely integrated but operate independently and are located together within the Royal Children's Hospital, close to the University and comprising part of the greatest local concentration of biomedical research activity in Australia. The Board of the Institute wishes to maintain and promote further the close integration of research and clinical work for which the Institute and VCGS are renowned. The Founding Director, Professor David Danks, has directed both the Institute and the VCGS. It is not essential for his successor to continue this arrangement but the option is available.

The Institute has substantial private and corporate endowment and is one of the 5 research institutes in Australia funded by a Block Grant from the National Health and Medical Research Council. The VCGS is funded by the Victorian Government to provide a full range of genetic services to a population of 5 million.

The appointee will be expected to take up the position not later than July 1, 1995 but an earlier appointment may be negotiated.

An attractive remuneration package will be negotiated based on the salary of a Professor of the University with additional benefits.

A statement with further information and details of method of application is available from Mr. Nell Walford, Chairman, Board of Directors, Murdoch Institute for Research into Birth Defects Limited, Royal Children's Hospital, Flemington Rd., Parkville 3052, Australia (Telephone 61-3-345-5045) (Facsimile 61-3-348 1391) with whom applications, which should be marked "Confidential", close on July 31, 1993.

The National Fisheries Contaminant Research Center, U.S. Fish and Wildlife Service, Columbia, Missouri is seeking an individual for the position of Deputy Chief Biologist (GM-13). The Deputy Chief is responsible for assisting in the management and direction of the Biology Division's research program. The scope of the Division's research activities includes: 1) toxicological studies of acute and chronic exposures of aquatic organisms to contaminants; 2) fundamental physiological, biochemical, behavioral, and genotoxicological investigations of contaminant effects on aquatic organisms; 3) studies of contaminant residue kinetics and dynamics; 4) studies of contaminant interactions with aquatic microbial communities; 5) investigations of the impact of contaminants on trophic relationships in model ecosystems; and 6) field investigations of contaminant impacts in polluted water bodies. Desired qualifications include a Ph.D. in the environmental sciences with expertise in ecotoxicology and experience in managing research projects.

The starting salary for a GM-13 position is \$47,920. Interested candidates should send a curriculum vitae to MS. Arlene Schwab, U.S. Fish and Wildlife Service, National Fisheries Contaminant Research Center, 4200 New Haven Road, Columbia, MO 65201. For additional information about the position, contact Dr. Denny R. Buckler, Chief Biologist, NFCRC, 314-875-5399 (FAX 314-876-1896).

ALL CANDIDATES WILL RECEIVE CONSIDERATION WITHOUT REGARD TO AGE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, POLITICS, SEX, OR OTHER NON-MERIT FACTORS.

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Lead a first rate molecular biology group. We require strong leadership experience, an extensive understanding of hematopoiesis, and a strong corporate or academic track record.

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Manage a major collaborative growth factor project. You'll need strong organizational skills and extensive knowledge of hematopoietic growth factors and stem cell biology.

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## ROBERT WOOD JOHNSON MEDICAL SCHOOL

### Department of Pharmacology

The Department of Pharmacology invites applications for 2 tenure-track positions, one at the Assistant Professor level and the other can be at a senior level. Individuals will be expected to develop a strong research program preferably in the general area of molecular biology or cancer biology, and to teach medical and graduate students. The positions offer competitive salaries and laboratory start-up packages.

The department has recently expanded and research opportunities exist for Postdoctoral candidates interested in cancer biology, cancer pharmacology, and protein-nucleic acids interactions.

Please send curriculum vitae and three letters of reference to: Dr. Leroy F. Liu, Dept. of Pharmacology, UMDNJ-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. UMDNJ, New Jersey's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.





## CHAIR OF ANATOMY

(Readvertisement)

Monash University invites applications for the position of Professor of Anatomy and Head of this Department within the Faculty of Medicine. The appointee will have proven skills in academic leadership and departmental administration with a sensitivity to the support of career development in his/her academic colleagues. Applicants will also have a successful record of research in the field of anatomical sciences or related disciplines, and have the ability to establish a significant research program within the Department. The appointee will also develop and establish undergraduate teaching programs in these areas while maintaining the existing high standards of teaching in the traditional anatomical sciences.

The Department plays a pivotal role in all aspects of the undergraduate medical teaching of Anatomy, having an established reputation for excellence in the field of morphological science teaching, which extends to the teaching of anatomy in second and third year BSc courses in the Faculty of Science. The annual intake of new medical and science students is approximately 160 and 120 respectively. The Department has 42 members of staff (including 13 full-time academic staff, most medically qualified; 10 medically qualified demonstrators, appointed annually) and 23 postgraduate students of whom 17 are PhD candidates. The Department has well-established links with several departments within the Monash Medical Centre. The department supports the development of interactive computer-learning programs, and is particularly well endowed with equipment and space for research laboratories and teaching. There is also some scope for appointment of further academic and technical staff. The Faculty is prepared to negotiate a generous establishment grant.

Salary: \$A77,900 per annum (plus appropriate preclinical and clinical loadings to medically qualified candidates). Superannuation, travel and removal allowance, and temporary housing assistance are available.

Enquiries of an academic nature may be directed to the Dean, Professor R. Porter, facsimile +61 3 565 4302.

Information on application procedure and further particulars may be obtained from the Personnel Officer (Chair Appointments), Monash University, Clayton, Victoria 3168, Australia, facsimile +61 3 565 6016.

Applications should reach the Director, Human Resource Management not later than Friday 18 June 1993. Council reserves the right to make no appointment or to appoint by invitation at any stage.



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## Director of NH&MRC National Research Centre for Environmental Toxicology

Applications are invited for the position of the Director of the NH&MRC National Research Centre for Environmental Toxicology. This Centre was established as an initiative of the National Health & Medical Research Council of Australia in collaboration with The University of Queensland and Queensland Health. It is an autonomous academic unit within The University of Queensland. It is located in the Queensland Government Chemical Laboratories at Coopers Plains, Brisbane, which is part of a growing complex that will ultimately form the Queensland Health Sciences Institute. It is also expected that collaborations with the nearby Griffith University will develop.

The Centre will be the focus of environmental toxicology in Australia and is expected to fulfil a national role in all aspects of the discipline. A major goal is to become a centre of excellence in research in human environmental toxicology. It is also expected that the Centre will train postgraduate research students, provide information and education for relevant professionals, and develop an information service in environmental toxicology. The opportunity exists also for consultative work by the Centre for State and Federal Governments and industry.

It is anticipated that the Centre will achieve its research goals by developing a number of groups with expertise in areas such as epidemiology, biological monitoring of low level exposure, mechanisms of toxicity and risk assessment. These groups, which will be established by the Director, will each consist of a senior scientist and support staff. The Director will be expected to have expertise in one of these areas as well as management and consultative skills.

The Director will be expected to have an international reputation in environmental toxicology. Medical qualifications are desirable but not essential. Appropriate experience and the ability to manage a research group are essential. If qualifications and experience are acceptable to the Selection Committee and the University, the appointment will be made at Professorial level.

Salary: Professor \$A77,900 per annum. A Clinical Loading of \$A13,484 per annum may be applicable.

Method of application: An original plus three (3) copies of an application and resumé, including the names, addresses and facsimile numbers of three referees quoting Reference No. 11993 should be sent to the Director, Personnel Services, The University of Queensland, Qld 4072, Australia, and should reach him no later than 12 May 1993.

For further information please contact Professor Susan Pond, Department of Medicine, The University of Queensland, Princess Alexandra Hospital, Ipswich Road, Brisbane, Queensland 4102, Australia, Telephone +61-7-240-5329, Facsimile +61-7-240-5399.

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS

The Department of Medicine/Medical Oncology of The University of Texas Health Science Center at San Antonio (UTHSCSA) has positions available for postdoctoral trainees in our NIH-funded breast cancer SPORE program. Areas of research include: immuno-histopathologic evaluation of prognostic factors, molecular characterization of ER variants, mechanisms of drug and hormone resistance, genetic markers of premalignant disease, oncogenes and tumor suppressors in breast cancer, transgenic mouse models, signal transduction, and growth factors. Minimum requirements are: Ph.D. degree in molecular or cellular biology or M.D. with research experience, U.S. citizen or permanent resident. Stipend to be determined by NIH fellowship guidelines. Send curriculum vitae, letter of research interests, and names of 3 references to: **C. Kent Osborne, M.D., Department of Medicine/Medical Oncology, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, TX 78284-7884.** The UTHSCSA is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.

**POSTDOCTORAL POSITION** in the Department of Neurology, University of California, San Francisco, to study calcium channels and neural differentiation. Background in signal transduction and experience with calcium imaging or molecular biology strongly preferred. Interested candidates please send a description of prior research experience and three letters of reference to: **Dr. Robert O. Messing, M.D., Building 1 Room 101, 1001 Potrero Avenue, San Francisco, CA 94110.**

### POSTDOCTORAL POSITION

**Radiation Oncology Research Lab  
University of California, San Francisco**

To study the role of heat shock proteins in repairing thermal damage to the centrosome, (*J. Cell Physiol.*, 154, 443-455, 1993). Methods to be used include immunocytochemistry, protein crosslinking, immunoprecipitation, and Western blotting. *The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Send curriculum vitae to: **Dr. Charles Vidair, Radiation Oncology Research Lab, University of California, San Francisco, 1855 Folsom Street, MCB-200, San Francisco, CA 94103-0806; FAX: 415/476-9069.**

**POSTDOCTORAL POSITIONS** will be available on or about 1 June 1993 to study the molecular genetics and biochemistry of natural product and anti-metabolites drug resistance in mammalian cells. Projects include: (1) the use of *in vitro* mutagenesis and drug selection *in vivo* to obtain altered forms of p-glycoprotein in an effort to define the mechanism(s) responsible for its drug efflux and chloride channel properties; (2) determination of the genetic basis for the differential amplification of polymorphic dihydrofolate reductase alleles in CHL cells during selection in antifolates; and (3) the identification and molecular characterization of the reduced folate transport system. Candidates must have a Ph.D., M.D. or equivalent degree and significant expertise in molecular biology and recombinant DNA techniques. Send curriculum vitae to: **Dr. Peter W. Melera, Department of Biological Chemistry and the Molecular and Cell Biology Program, University of Maryland, Biomedical Research Facility, 108 North Greene Street, Baltimore, MD 21201.** *Equal Opportunity/Affirmative Action Institution.*

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## POSITIONS OPEN

**POSTDOCTORAL POSITION** available to study the molecular basis of cell differentiation in *Aspergillus nidulans*. Classical and molecular genetic approaches will be used to investigate spatiotemporal expression of essential regulatory genes and biochemical functions of gene products (*Genes & Dev.* 6: 1770-82). Experience in molecular biology and/or genetics is desirable. Salary \$25,000. Send curriculum vitae and three letters of reference to: **Dr. Bruce L. Miller, Department of Bacteriology & Biochemistry, University of Idaho, Moscow, ID 83843.** *Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL IN BASIC NEUROSCIENCE

To investigate the function of heme oxygenases and HSP's in neurodegenerative disorders. Experience in biochemistry of the brain and cell culture is essential.

Send curriculum vitae and names of three references to:

**Dr. Mahin D. Maines  
University of Rochester School of Medicine  
Department of Biophysics  
Rochester, NY 14642 USA**

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**POSTDOCTORAL POSITION IN BEHAVIORAL GENETICS** available in an ongoing selective breeding program to develop and characterize an animal behavioral model of information processing/attentional deficits in schizophrenia. Related efforts will include investigation of the pharmacogenetics/defect state dependency of antipsychotic drugs and use of *in vivo* MR imaging, receptor autoradiography and intracerebral microdialysis to define correlated responses to behavioral selection. Ph.D. in behavioral neurosciences required. Experience in behavioral genetics and psychopharmacology is desired. Send curriculum vitae and letter describing qualifications to: **Dr. Clint Kilts, Department of Psychiatry and Behavioral Science, P.O. Drawer AF, Emory University School of Medicine, Atlanta, GA 30322.** *Emory University is an Equal Opportunity/Affirmative Action Employer.*



### POSTDOCTORAL ASSOCIATE

Postdoctoral positions are available to study gene expression in pre-implantation mouse embryos at the McLaughlin Research Institute (MRI) in Great Falls, Montana. MRI is an expanding basic research institute that will focus entirely on the mouse as an experimental model. Questions about the growth and development of mammals and about the genetic basis of disease will be addressed using molecular biology and genetics. The institute is about to move into a newly constructed building with spacious modern laboratories and state-of-the-art animal care facilities for housing large colonies of mice at low cost. Please forward curriculum vitae and the names and addresses of three references to: **Dr. William Crain, McLaughlin Research Institute, 1625 Third Avenue North, Great Falls, MT 59401.**

### POSTDOCTORAL POSITION

Available immediately to investigate the mechanism of transforming growth factor  $\beta$ -mediated growth inhibition. Investigation will focus on TGF $\beta$  receptor signaling and cell cycle dependent kinases/cyclins. Send curriculum vitae and names of three references to: **Dr. Philip H. Howe, Department of Cell Biology (NCI), Cleveland Clinic Research Foundation, Cleveland, OH 44195.**

**POSTDOCTORAL POSITIONS** in Neuroimmunology/Neuro-oncology at Harvard Medical School, to begin December 1, 1993. Goal is understanding and manipulating the immune response to CNS antigen, particularly disseminated tumor in the brain. Projects include selective control of leukocyte traffic, 3-D analysis of tumor-leukocyte interactions. Training in cellular immunology, molecular biology, or neuropathology desirable. Reply to: **Dr. L. Lampson, Neurology, Brigham and Women's Hospital, Boston, MA 02115.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately on an NIH Vision Training Grant to isolate and characterize cataract genes. *Candidate must be a U.S. citizen or permanent resident.* Please send curriculum vitae and two references to: **Dr. Dwight Stambolian, University of Pennsylvania, School of Medicine, Department of Genetics, Clinical Research Building, 422 Curie Boulevard, Philadelphia, PA 19104.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION.** Available immediately in the Division of Nutritional Sciences and Section of Biochemistry, Molecular and Cell Biology at Cornell University. The research project involves the characterization of inhibitors targeted at the glucose-6-phosphate translocase component of the hepatic microsomal glucose-6-phosphatase system and use of these site-directed, high-affinity probes to identify the protein and effect its purification. Ph.D. in biochemistry or related field required. Send curriculum vitae and three letters of reference to: **Dr. William J. Arion, 227 Savage Hall, Cornell University, Ithaca, NY 14853.** Telephone: (607) 255-2684. *Equal Opportunity Employment/Affirmative Action Employer.*

**POSTDOCTORAL POSITION:** Position available to study *S. cerevisiae* in one of the following areas: (1) molecular analysis of a "hotspot" of meiotic recombination, (2) replication and stability of simple repetitive DNA sequences, (3) non-homologous recombination, and (4) cell death. Individuals with experience in genetics and/or molecular biology are preferred. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.* Please send three letters of recommendation and curriculum vitae to: **Dr. T. Petes, Department of Biology, University of North Carolina, Chapel Hill, NC 27599-3280.**

**POSTDOCTORAL POSITION IN STRUCTURAL BIOLOGY.** (Available immediately). NIH-supported research in the laboratory of Dr. Brian Johnston at SRI focuses on the following areas: • **Structure of recombination intermediate** • **Development of peptide-based anti-HIV agents** • **DNA triplexes.** Recent publications include: *PNAS* 89, 3526-3530 (1992); *Biochemistry* 31, 320-327 (1992); 32, 2800-2807 (1993); *Nucl. Acids Res.* 20, 5279-5288 (1992); *J. Mol. Biol.*, April 3, 1993 issue. SRI (formerly Stanford Research Institute) is a large nonprofit research institute located near Stanford University. Our department, Cell and Molecular Biology, is expanding. Successful Postdoctoral Fellows who wish to continue at SRI may be considered for regular staff positions. Experience in standard molecular biology techniques, peptide/protein biochemistry, computer modeling, and/or synthetic chemistry is useful. Interested candidates for this position having a recent Ph.D. in Chemistry, Biochemistry, Molecular Biology or a related field should send curriculum vitae and 3 reference letters to: **Dr. Brian Johnston, SRI International 20519, 333 Ravenswood Avenue, Menlo Park, CA 94025.** Salary approximately \$30,000 plus full benefits. *Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the molecular mechanisms of homologous recombination reactions. Self-motivated, careful individuals with a demonstrated record of productivity and expertise in nucleic acid chemistry, biochemistry and/or molecular biology are sought. Send a letter of research interest, curriculum vitae, and names of three references to: **Dr. Kenji Adzuma, The Rockefeller University, Box 169, 1230 York Avenue, New York, NY 10021.** *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL SCIENTIST.** National Institute for Environmental Studies (NIES), Environmental Health Sciences Division. Applications are invited for a 1- to 2-year postdoctoral position, funded by the Science/Technology Agency, for research into the physiological roles of metallothionein. Experience in molecular biology, biochemistry and cell biology would be an asset. Before application, please see details of the condition of employment (*Science* 255, 27 March 1992; *Nature* 356, 19 March 1992). Applications including curriculum vitae, list of publications and the names and addresses of two professional referees should be sent to: **Dr. C. Tohyama, Environmental Health Science Division, NIES, 16-2 Onogawa, Tsukuba 305, Japan.** Fax: +81-298-51-0471.

## Alzheimer Disease Research

Cephalon, Inc., widely recognized as a leader in neurological research and drug development, specializes in developing breakthrough treatments for neurological disorders including narcolepsy, neuromuscular diseases, Alzheimer's disease and stroke.

As a result of our recently expanded commitment to Alzheimer research, we are now seeking highly motivated individuals at the PhD and non-PhD levels to take a lead role in our efforts to develop *in vitro*, cell culture-based, and animal models of Alzheimer amyloid. These efforts will be integrated with ongoing research and drug-discovery efforts focused on APP processing and amyloid formation.

Individuals with backgrounds involving some combination of protein chemistry and purification, immunoassays, HPLC and FPLC, mammalian cell culture and molecular biology are encouraged to apply. PhD candidates should have a background in biochemistry, neurobiology or related fields, and 0-4 years of postdoctoral experience. Non-PhD candidates should have 4 or more years of similar laboratory experience.

Cephalon is committed to your professional development. Publications and meeting attendance are encouraged, and interactions are available through outside collaborations with a number of important contributors to the Alzheimer research field. We offer a stimulating and exciting work environment, equity participation, and unlimited growth opportunities.

We are located in the suburban Philadelphia area, providing easy access to the Atlantic Coast and Chesapeake Bay region from New York City, to Washington, D.C. If you are interested in taking advantage of this unique opportunity, send your resume and names of three references to:

### Cephalon, Inc.

Attn: Janet Marie Kuder  
145 Brandywine Parkway  
West Chester, PA 19380-4245



An equal opportunity employer

**PROMEGA CORPORATION**, leading the biotechnology industry worldwide, is currently seeking three qualified professionals with the following expertise to enhance our Nucleic Acid Chemistry R & D team and join a dynamic and rapidly expanding company.

### RESEARCH SCIENTISTS

- Bio/organic Chemist with M.S./B.S. in chemistry or biochemistry with 3 years' experience in synthesis of complex molecules; experience with modern separation and analytical techniques including HPLC; and familiarity with experimental molecular biology. Prefer experience in modern synthetic organic methods particularly in a biotechnical or pharmaceutical research environment.

OR

- Experience with development of modified nucleotides and oligonucleotide chemistry as well as molecular biology and chemistry.

OR

- Extensive experience with routine molecular biology methods including Southern/Northern blot analysis, PCR, library construction and screening and routine DNA/RNA manipulation. Experience with *in situ* hybridization techniques helpful.

The last two positions require an M.S./B.S. in molecular biology or biochemistry and 3-5 years' lab experience. Computer experience desirable.

We offer competitive salary, comprehensive benefits and a challenging, high-growth environment in our modern Midwestern facilities. To apply, forward a resume with salary requirements to: **PROMEGA CORPORATION, HUMAN RESOURCES/CS, P.O. Box 7879, MADISON, WI 53711-7879**. Equal opportunity employer. (No agency solicitation accepted.)



**Promega**

PROMEGA CORPORATION is proud to be an Equal Opportunity/Affirmative Action Employer.

IDEC Pharmaceuticals Corporation has gathered a dedicated scientific and administrative team focused on achieving our corporate mission of developing antibody-based therapeutics. Currently we are seeking individuals for the following positions:

### DIRECTOR, PRECLINICAL DEVELOPMENT

The Director will provide leadership for multidisciplinary groups responsible for preclinical development of therapeutic antibodies including Path/tox, pharmacokinetics, analytical chemistry, quality control and formulation studies. Qualified individuals should have expertise in preclinical development disciplines and processes necessary for IND and PLA submissions and broad knowledge in the technical and strategic aspects of such disciplines. Industrial experience in managing preclinical development activities, designing protocols and submitting reports, and a track record of regulatory submissions and approvals of INDs and PLAs/NDAs for therapeutic products.

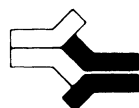
### SCIENTIST, PRECLINICAL DEVELOPMENT

This Scientist will conduct pharmacokinetic and pharmacology studies in support of antibody development. Duties will include designing and conducting pharmacokinetic and biodistribution studies on lead antibody products, providing leadership in defining appropriate animal models and systems for characterizing antibody and antibody fragments and conjugates *in vivo*, and establishing animal models for evaluating pharmacodynamics of antibodies. The successful candidate will have a PhD in Chemistry, Biology, or a related discipline and at least 4 years of industrial experience. Experience should include designing pharmacokinetic/pharmacodynamic experiments and reporting data for regulatory submissions, and working with animals.

### CELL BIOLOGIST

This scientist-level position involves establishing cellular and biochemical assays for the evaluation of antibody activities, providing leadership for the characterization of antibody-receptor interactions and agonist/antagonist activities on immune cell functions, and designing and conducting experiments in signal transduction to support antibody evaluation. This individual will be expected to collaborate with other multidisciplinary groups at IDEC and supervise scientific staff. Requirements include an appropriate PhD (e.g. Immunology, Biology, or similar focus) and 4-6 years of related postdoctoral experience.

IDEC Pharmaceuticals is a leader in the development of immunologically active monoclonal antibodies for therapeutic applications in the area of certain cancers, HIV infection, and autoimmune disorders. We pride ourselves in the excellence of our team members and invite you to join us. We offer a competitive compensation package and excellent working conditions. For consideration, please send your resume and references to: IDEC Pharmaceuticals Corporation, Ad SC, 11099 N. Torrey Pines Rd., Ste. 160, La Jolla, CA 92037. EOE.



**IDEC**  
PHARMACEUTICALS  
CORPORATION





## GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is directed towards the discovery of novel molecular mechanisms that can be used as drug targets to treat serious diseases. In particular, research is focused on the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for a

### **NEUROBIOLOGIST** to study the Control of Gene Expression in Drug Dependent States

Applications are invited from candidates interested in applying novel approaches to understand drug dependency. The ideal candidate will have several years of relevant experience with modern techniques of histology and image analysis.

The successful candidate will have a leading role working with an international team of physiologists, molecular biologists, and pharmacologists investigating the molecular biology of drug addiction. Informal enquiries can be directed to Dr. Eric Kawashima or Dr. Jonathan Knowles at the Glaxo Institute (41-22-7069666).

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live. The Institute for Molecular Biology is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to : Rita Gloor, Personnel Manager, Glaxo Institute for Molecular Biology, 14, chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.

### **SCIENTIFIC OFFICER, OCEAN ACOUSTICS**

The Office of Naval Research is seeking a highly qualified individual to plan and manage a contract research program in the broad field of ocean acoustics. The sponsored research is conducted principally at universities and government/industrial laboratories by leading scientists in the field. This is a Civil Service position at the GM-13, 14, or 15 level (\$47,920 - \$86,589), depending on qualifications.

The individual selected will establish goals for and conceive, organize and direct research and development programs in new areas of ocean acoustics including but not limited to propagation through random media; scatter from rough surfaces; reverberation from surface volume and bottom, specifically as it relates to shallow water acoustics; bio-acoustics; and high frequency acoustics. The incumbent will identify new research opportunities, evaluate and select research proposals for funding, manage funding resources, communicate ONR's interests to the scientific community and represent the program within the Navy and DoD. This position provides the challenge and opportunity to have a significant impact on the direction and quality of research in ocean acoustics at the national level. Additionally, the opportunity exists to establish or maintain an individual research program at an academic institution or government laboratory.

Applicants must have a Ph.D. or equivalent training in physics or in a physical science area related to ocean acoustics and at least one year of professional experience OR an equivalent combination of education and experience. To be qualifying, this experience must have been at a level of difficulty and responsibility equivalent to that of the next lower grade level in the Federal Service. In addition, the applicant MUST have knowledge and experience in current state-of-the art research involving ocean acoustics which is evidenced by recent and significant publications in scientific literature. Applicants without this knowledge and experience will not be rated qualified for this position. Demonstrated experience in managing a basic and/or applied research program or project is strongly preferred.

Interested persons should send a resume, list of publications and a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to: **OFFICE OF NAVAL RESEARCH, SATELLITE HUMAN RESOURCES OFFICE, ONR CODE 01HR1, ATTN: ANNOUNCEMENT #93-07 (SCIENCE), 800 NORTH QUINCY STREET, ARLINGTON, VA 22217-5660.**

Applications will be accepted through **28 May 1993**, and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (703) 696-4705 or TDD (telecommunication device for the deaf) (703) 696-2681.

**U.S. Citizenship Required**

**An Equal Opportunity Employer**

# A Dynamic, Expanding Research Mission Characterized by Scientific and Cultural Diversity.

Organic and Synthetic Chemistry

Computational Chemistry

Biochemistry

Molecular and Cellular Biology

Pharmacokinetics and Drug Metabolism

Neuroscience



A diverse group of dedicated scientists is working at the Miles Research Center (MRC) to develop therapeutic solutions for neuro-degenerative diseases, metabolic disorders and bone and joint diseases. Intelligence, creativity, insight, ability, commitment and determination are critical attributes of good scientists which transcend gender and racial distinction. Miles offers individual scientists an opportunity to grow in an open and challenging international scientific environment with a focus on improving human health and quality of life. The MRC represents an investment in the future of pharmaceutical research by one of the top worldwide pharmaceutical companies. Less than 10 minutes from Yale University, the MRC offers modern, expanding research facilities located along the Connecticut coast between New York City and Cape Cod.

If you are a Ph.D. with at least one year of relevant research experience in any of the areas listed, Miles presents the opportunity to work in a rapidly growing pharmaceutical company with an established history of successful products. We offer a very competitive salary and comprehensive benefits package. Interested candidates, please send resume with salary requirements to: **A.R. Aceto, Human Resources Department, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.** An Equal Opportunity Employer M/F/H/V.

## SCIENCE WRITER



*La Jolla, California*

The Scripps Research Institute has a position available for a Science Writer of scientific/technical reports. The successful candidate must have strong writing skills, ability to organize and coordinate scientific material, and knowledge of cell and molecular biology. An advanced degree in Biological Science would be helpful.

Qualified applicants should submit curriculum vitae to: The Scripps Research Institute, Attn: 41693, 10666 N. Torrey Pines Rd., TPC-11, La Jolla, CA 92037, or fax to: (619) 554-6668. AA/EOE.



## Senior Scientist

We have an immediate opening in our 3M Pharmaceuticals Division for a Pulmonary Drug Discovery Scientist. This position will be located at our Research facilities in St. Paul, Minnesota.

This position will provide technical leadership in a laboratory focused on discovering new drugs for treating pulmonary diseases such as asthma and allergies. Duties will include establishing new primary screening models as well as working with existing ones. Responsibilities also include supervision and interaction with other researchers.

We require a PhD in Pharmacology, Physiology or Biochemistry with a minimum of 3 years research experience. Pharmaceutical experience preferred.

3M has an excellent benefits package with salary commensurate with experience. For confidential consideration send your resume (no phone calls or employment agency referrals, please) to:

**NAS Reply Service  
Dept. 4MP287  
One Appletree Square  
Minneapolis, MN 55425**

We Are An Equal Opportunity Employer



## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** available in The Department of Microbiology and Molecular Genetics, The University of Texas Health Science Center, Houston, P.O. Box 20708, Houston, TX 77225. Direct inquiries to:

**Dr. S. Kaplan:** Gene regulation of membrane biosynthesis by oxygen and light, redox control of gene expression, oxyanion reduction, genome organization and membrane assembly in *Rhodobacter sphaeroides*.

**Dr. P. J. Christie:** Structure/function analyses of the T-DNA/protein complex and its transport from *Agrobacterium tumefaciens* to plant cells.

**Dr. H. B. Kaplan:** Molecular genetic and biochemical studies of cell-cell interactions and signal transduction required for *Myxococcus multicellular* development.

The University of Texas Health Science Center is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

### POSTDOCTORAL POSITION

Available immediately to study the genetics and molecular biology of the heat shock response in the yeast *Saccharomyces cerevisiae*. Experience with molecular biology, genetics, or protein biochemistry is desirable. Send curriculum vitae and three letters of reference to: J. José Bonner, Department of Biology, Indiana University, Bloomington, IN 47405.

### POSTDOCTORAL POSITION NEUROIMMUNOLOGY

Position available immediately for a Ph.D., D.V.M. or M.D. with background in immunology or neurology, to study the interaction of lymphocytes and central nervous tissue. This program will provide collaborative opportunities with a multidisciplinary team involved in immunology, virology and molecular biology. Please send curriculum vitae and the names of three references to: Roel C. van der Veen, Ph.D., USC School of Medicine, Department of Neurology, MCH 142, 2025 Zonal Avenue, Los Angeles, CA 90033.

The University of Southern California is an Equal Opportunity/Affirmative Action Employer and especially seeks women and minority candidates.

**THE DEPARTMENT OF NEUROPHARMACOLOGY** currently has a **POSTDOCTORAL POSITION** available involving research aimed at developing transgenic mice to study the pathogenesis of neurodegenerative disease. Selected candidate must have a Ph.D., including experience and skills in immunobiology, molecular pathogenesis and transgenic technology. Send curriculum vitae and three letters of reference to: THE SCRIPPS RESEARCH INSTITUTE, Attention: 31693, Dr. Iain Campbell, Department of Neuropharmacology, CVN9, 10666 North Torrey Pines Road, La Jolla, CA 92037. Affirmative Action/Equal Opportunity Employer.

### RESEARCH ASSOCIATE/ POSTDOCTORAL POSITION

Available immediately to identify genes that could be involved in growth and development of shrimp, supported by the U.S. Department of Agriculture. Recent Ph.D. or D.V.M. graduate with expertise in molecular genetics/biology and at least two years of experience with cDNA synthesis and cloning, library screening, and sequencing techniques is desirable.

Send curriculum vitae and names of three references to: Dr. Acacia Alcivar-Warren, Department of Comparative Medicine, Tufts University School of Veterinary Medicine, 200 Westboro Road, North Grafton, MA 01536.

**POSTDOCTORAL CHEMIST** to conduct multidisciplinary research in the development of new radiopharmaceuticals for PET and SPECT imaging. Job requires a Ph.D. degree in organic or medicinal chemistry, strong background in synthesis; working knowledge of pharmacology and experience in radioisotope handling helpful but not necessary. Excellent opportunity for chemists to apply synthetic techniques to the *in vivo* diagnostic imaging field. Please send résumé and curriculum vitae to: Dr. Hank F. Kung, Departments of Radiology and Pharmacology, University of Pennsylvania, Room 305, 3700 Market Street, Philadelphia, PA 19104.

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS ORGANIC CHEMISTRY/ MOLECULAR BIOLOGY

Immediately available to study the *in vitro* selection of protein/nucleic acid interactions and novel ribozymes (*Nature*, 346, 818). For chemists: projects involve the evolution/construction of macromolecular host-guest complexes, and will require the synthesis of modified nucleotides. Experience in synthetic organic chemistry (preferably of nucleosides or related heterocycles) is a must. This is a good cross-over position for chemists who wish to learn molecular biology and participate in the development of medically relevant molecules. For molecular biologists: projects involve the selection of nucleic acid sequences that will interact with proteins involved in inflammation response, and will require experience in the *in vitro* manipulation and amplification of both RNA and DNA. Send curriculum vitae, including names of 3 references, to: Dr. Andrew Ellington, Department of Chemistry, Indiana University, Bloomington, IN 47405. Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL POSITION UNIVERSITY OF MICHIGAN

**MOLECULAR GENETICS POSITION** available immediately to participate in ongoing work to map, clone and study human x-linked retinal disease genes, particularly juvenile retinoschisis. Experience in molecular biology desirable; genetic aspects will be taught. Affiliated with the Human Genome Initiative at the University of Michigan.

Competitive salary plus benefits. Interested candidates should send curriculum vitae and references to: Dr. Paul Sieving, M.D., Ph.D., Kellogg Eye Center, University of Michigan, 1000 Wall Street, Ann Arbor, MI 48105. FAX: (313) 936-2340. The University of Michigan is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** in a neurobiology training program is available to examine effects of withdrawal from chronic cocaine pretreatment using *in vivo* and *in vitro* recording techniques. U.S. citizenship or permanent residency required. For further information, contact: Dr. Everett H. Ellinwood, Box 3870, Duke University Medical Center, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** available immediately to study peptide design, structure and molecular dynamics. Research projects will require the use of automated peptide synthesis, magnetic resonance techniques (ESR and NMR), vibrational and optical spectroscopy. Applicants should have experience with two or more of these techniques and have a Ph.D. in Chemistry, Biochemistry or closely related field. Please send curriculum vitae and three letters of recommendation to: Dr. Glenn L. Millhauser, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064.

### POSTDOCTORAL POSITIONS AVAILABLE Molecular and Cellular Biology of Yeast

Positions available for individuals interested in using both genetic and biochemical techniques to understand either the mechanisms of pheromone receptor function, the mechanisms of killer toxin lethality, or the regulation of mRNA stability in the yeast *Saccharomyces cerevisiae*. **Position A:** Projects will focus on the identification and characterization of cis-acting sequences and trans-acting factors that promote the rapid decay of inherently unstable mRNAs or mRNAs that become unstable as a consequence of early nonsense mutations. **Position B:** Possible research topics include the role that the pheromone receptor plays in signal transduction and endocytosis as well as the identification of factors controlling the elimination of structurally defective receptors. **Position C:** Functional analysis of cDNA copies of killer genes and the cloning and analysis of genes defining toxin targets. These include the cell permeability barrier and a cell cycle event between START and the initiation of DNA synthesis.

Applicants should send curriculum vitae and the names of three references to: Dr. Allan Jacobson (Position A), Dr. Duane Jenness (Position B), or Dr. Donald Tipper (Position C), Department of Molecular Genetics and Microbiology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.

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## POSITIONS OPEN

**RESEARCH ASSOCIATE** position to investigate the molecular basis for the genetic causes of fetal loss. Requirements M.D. or D.V.M.; Ph.D. or equivalent in immunology or genetics; experience with reproductive research, molecular techniques and immunochemical techniques. Send complete curriculum vitae to: Dr. Thomas J. Gill III, Department of Pathology, School of Medicine, University of Pittsburgh, Pittsburgh, PA 15261. FAX: (412) 648-9530.

**RESEARCH SCIENTIST.** Duties: To carry out laboratory functions related to microbial transformations of compounds of biological importance. Experience in chromatographic separations and spectroscopic characterizations is essential. Requirements: A Ph.D. in Pharmacognosy, Microbiology, Natural Products or related discipline. Postdoctoral experience desirable. Salary range from \$25,000 to \$30,000; position available for at least two years. Deadline: June 1, 1993. The University of Mississippi is an Affirmative Action/Disabled/Equal Employment Opportunity Employer.

Send résumé and supporting information to: Business Office, School of Pharmacy/Research Institute of Pharmaceutical Sciences, 206-W Faser Hall, University of Mississippi, University, MS 38677.

**RESEARCH SCIENTIST—CONDUCTORS** will plan, conduct and supervise long- and short-term research programs to develop thick film conductor inks for various substrates. Will develop slip formulation for tape casting; measure physical and chemical properties of inks; develop test procedures for new products; and develop new processes for producing stable ceramic suspensions. Will conduct related research, literature searches, attend conferences and short technical courses, present papers on research results, support research on thick film conductor inks and interface with customers to understand the exact application of products. Will work with SEM, DTA, TGA, Dynamic Rheometer, Zeta Meter, Light Scattering Unit, XRD, Surface Area Analyzer, UV Spectrophotometer, Tape Caster, Sedigraph, TEM or CIP.

As part of an academic program or industrial employment, candidate must have three years of research experience in development of metal/ceramic/organic suspensions for various applications. Experience must be rheology of organic/aqueous suspensions, colloidal processing, sol-gel processing and sintering of composite powders. Candidate must be familiar with all conductor properties characterization equipment and material characterization equipment such as Scanning Electron Microscope (SEM), X-ray Diffraction (XRD), Thermo-Gravimetric Analysis (TGA), Surface Area Analyzer, UV Spectrophotometer, Light Scattering Unit, Tape Caster, Sedigraph, TEM, DTA and CIP. A Ph.D. in Material Science, Metallurgical Engineering or Ceramic Engineering and familiarity with quality control procedures and standards for thick film conductor inks is required. Salary: \$4,500 per month. Job site/interview: Santa Barbara, California. Send this advertisement and your résumé to: Job #ET3701, P.O. Box 269065, Sacramento, CA 95826-9065 no later than May 1, 1991.

### NEW PRODUCT DEVELOPMENT SCIENTIST

Collaborative Biomedical Products/BECTON DICKINSON Labware develops, manufactures and sells innovative products for cell science and seeks individual to develop new products in areas of extracellular matrix, cytokines and *in vitro* cell culture systems; provide support to sales, marketing, manufacturing, QA/QC; and participate in product development strategy, testing and patent applications. Requires advanced degree in life science, preferably cell biology, and 5 to 7 years of related experience. Submit résumé to: C. Kaminsky, Manager, Human Resources, Collaborative Biomedical Products/Becton Dickinson Labware, Two Oak Park, Bedford, MA 01730. An Equal Opportunity Employer.

**SENIOR NEUROSCIENTIST** with interest in aging and neurodegenerative disease. Please send curriculum vitae, statement of research interests and laboratory program, and three letters of reference to: Dr. Caleb E. Finch, University of Southern California, Ethel Percy Andrus Gerontology Center, 3715 McClintock Avenue, Los Angeles, CA 90089-0191. Telephone: (213) 740-1758. The University of Southern California is an Affirmative Action/Equal Opportunity Employer.





## New Jersey Medical School MINORITY VITAE BANK

UMDNJ-New Jersey Medical School is committed to the successful recruitment and retention of qualified women and members of minority groups. The expansion of our faculty and administrative recruitment program, marked by the development of a Minority Vitae Bank, is designed to maintain an extensive file of candidates who are seeking academic employment. This is not an offer of employment or a placement service. The New Jersey Medical School enthusiastically encourages applications from women and members of minority groups.

Please submit your CV and a cover letter, including a brief summation of your current academic rank and primary academic department, research/academic interests/clinical specialty and any additional background information which might prove helpful in placement. We would also appreciate knowing where you saw this advertisement. Please submit all information to: **Dr. Anthony J. Garro, Associate Dean for Academic Affairs, UMDNJ-New Jersey Medical School, 185 South Orange Avenue MSB C671, University Heights, Newark, NJ 07103-2714.** UMDNJ, NJ's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.



## Research Scientists

Ixsys, a growing biopharmaceutical company, exploits a series of unique technologies that permit the discovery of novel therapeutic peptides and human monoclonal antibodies directed toward specific disease targets. We have several research and development positions available immediately for highly motivated and creative individuals for research and development positions.

### PRECLINICAL DEVELOPMENT

**Scientists/Senior Scientists:** A Ph.D. with 3-5 years of industry experience in a multidisciplinary screening laboratory. #3009S

**Research Associates/Senior Research Associates:** A BS/MS with 3-7 years of laboratory experience in cell biology/cellular immunology and a background in developing *in vitro* bioassay systems. #3005S

**Scientists:** A Ph.D. in cell biology and 3 years experience in scaleup mammalian and bacterial cell culture development are desired. #3010JD

**Research Associates:** A BS/MS and at least 3 years of experience in cell culture and scale-up, antibody isolation, purification and characterization. #3006S

A BS/MS in molecular biology with at least 3 years' experience in mammalian and/or bacterial expression systems. #3007S

A BS/MS in biology/chemistry with at least 2-3 years of experience establishing *in vivo* and *in vitro* models with antitumor activities of novel therapeutics. #3011S

### PEPTIDE DISCOVERY/ANTIBODY ENGINEERING

**Scientists/Senior Scientists:** Candidates will establish a protein chemistry laboratory for the identification and characterization of peptides of therapeutic interest. A Ph.D. with at least 5 years' experience is desired. #3012S

**Research Assistants/Associates:** A BS/MS with at least 1 year of laboratory experience in molecular biology which may include DNA sequencing, gene cloning, peptide screening and ELISA assays. #3008S

Please send your resume to: Ixsys, Inc.  
3550 General Atomics Court, Suite L -103, San Diego, CA 92121  
(It is important that you reference the position #)

## PIONEERING A NEW CLASS OF HUMAN THERAPEUTICS

At Gilead Sciences, we are pioneering a new class of human therapeutic compounds based on nucleotides, the molecular building blocks of DNA and RNA. Nucleotide compounds can be modified to act inside or outside the cell to selectively inhibit the production or activity of disease-causing proteins. Come join our dynamic team of scientific professionals as we successfully develop disease-fighting drugs that target cancer, cardiovascular disease, inflammation and viral infections.

Opportunities currently exist for Research Scientists, Research Biologists and Research Chemists in the following programs.

### Small Molecules:

#### *A New Sphere Of Scientific Influence*

We are currently undergoing clinical evaluation for two of our small molecule compounds for antiviral (HIV & CMV) applications. Our Small Molecule Program is focused on the development of small molecule nucleotide analogs designed to interfere with disease-causing proteins.

### Aptamers:

#### *Using Test Tube Evolution For Rapid Drug Discovery In Human Therapeutics*

Join us as we develop nucleotide affinity agents to fight cardiovascular and inflammatory disorders. Our Aptamer Program is presently pursuing oligonucleotide circulating proteins to achieve inhibition of their activity.

### Code Blockers:

#### *Deactivating Disease At The DNA/RNA Level*

Our Code-Blocker Program, based on oligonucleotide analogues, is exploring the binding activity of antisense and triple-helix compounds to prevent the expression of disease-causing proteins

As an emerging force in the biotechnology industry, Gilead provides a comprehensive and benefits package, which reflects our leadership and commitment to our science. To learn more about our opportunities, please send your CV to: Human Resources, Gilead Sciences, 353 Lakeside Drive, Foster City, CA 94404.

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SCIENCES

# PRINCIPAL SCIENTIST

## Molecular Biology/Pharmacology

The Janssen Research Foundation, a member of the Johnson & Johnson family of companies, is an international leader in the discovery of innovative therapeutics.

Inquiries are invited for a position in the Oncology and Endocrinology Research Group located in suburban Philadelphia. To qualify, applicants must have 5 plus years experience after having earned a Ph.D. in Biochemistry, Molecular Biology or related discipline. Broad experience with recombinant DNA techniques is essential. A broad-based knowledge of pharmacology, oncology, or auto-immune/inflammatory disease is a definite asset; additional experience in drug discovery research is preferred, as is supervisory experience.

The successful candidate will be expected to collaborate on and contribute to ongoing research projects as well as establish new drug discovery research programs. A broad application of molecular biology techniques will be required including cloning and cellular expression of human proteins as targets for drug screening, establishing stable transfectant cell lines for functional assays, PCR, and hybridization techniques.

This individual will also closely interact with our Molecular Biology Group located in Belgium.

We offer a competitive salary and the comprehensive benefits of a Johnson & Johnson company. For immediate, confidential consideration, please submit a copy of your resume with salary requirements to: Ms. Jackie Richardson, Janssen Research Foundation, Welsh and McKean Roads, Spring House, PA 19477-0776. An Equal Opportunity Employer M/F/D/V.

## JANSSEN RESEARCH FOUNDATION

"Where Research Is The Driving Force"

*a Johnson & Johnson company*

►ScripTech is building an impressive scientific team, in the area of drug discovery, with the following specific positions available immediately.

### GROUP LEADER Medicinal Chemistry

Reporting to the Head of R&D, this position will oversee our Medicinal Chemistry Group in the areas of synthetic organic chemistry, small molecule synthesis and development of structure/activity relationships. A Ph.D. is required; 5-10 years' related experience is preferred.

### SENIOR SCIENTISTS - Medicinal Chemistry

ScripTech is seeking Ph.D. scientists with 3-5 years' post-doctoral experience to join its research programs in synthetic organic chemistry and medicinal chemistry. Experience with the design, development and synthesis of synthetic small molecules along with an understanding of structure/activity relationships is required.

### SENIOR SCIENTISTS

ScripTech is seeking Ph.D. Senior Scientists with 0-5 years' post-doctoral experience to join its drug discovery and development teams. Candidates with experience in the following areas will be considered:

- Synthetic Organic Chemistry
- Medicinal Chemistry
- Pharmacology
- Virology
- Protein Biochemistry
- Structural Biology
- Microbiology
- Molecular Biology

Discover a biopharmaceutical company with a novel approach.

Introduce yourself to ScripTech Pharmaceuticals, Inc. in Cambridge, MA, the new biopharmaceutical company dedicated to discovering and developing a novel class of drugs that act by inhibiting factors which regulate transcription and other processes of gene expression. The key to our achievement is highly motivated, well-rounded professionals who not only reflect the energy, expertise and commitment of our scientific team, but will also thrive in our stimulating, creative environment.

ScripTech offers highly competitive salaries and a comprehensive benefits program. Forward your resume, indicating position of interest, to ScripTech Pharmaceuticals, Inc., Director of Human Resources, 185 Alewife Brook Parkway, Suite 4200, Cambridge, MA 02138. Fax: (617)497-2975. An Equal Opportunity Employer.

**ScripTech Pharmaceuticals, Inc.**

## RESEARCH OPPORTUNITIES POST-DOCTORAL

Cedars-Sinai Medical Center has immediate Post-Doctoral positions available in the following areas:

### VASCULAR BIOLOGY

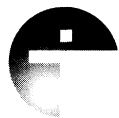
As a key member of our multidisciplinary Cardiovascular Biology Group, you will be working in our new state-of-the-art Research Building studying vascular biology. NIH funded projects include the molecular biology and action of a novel parathyroid hormone-related protein as well as the generation of transgenic models to study vascular injury. Experience with molecular biology/transgenic animal models preferred.

### MOLECULAR GENETICS

This position will be responsible for studying molecular genetics of thyroid neoplasms. Experience with molecular biology is highly desirable.

Send curriculum vitae and names of 3 references to: Dr. J. Fagin or Dr. T. Clemens, Dept. of Medicine, CEDARS-SINAI MEDICAL CENTER, 8700 Beverly Blvd., Los Angeles, CA 90048. (310) 855-4691. (AA/EOE)

 **CEDARS-SINAI  
MEDICAL CENTER**



# CTI

CELL THERAPEUTICS, INC.

**Cell Therapeutics, Inc.** is an innovative biopharmaceutical start-up company focused on the design and development of drugs that influence a variety of significant human diseases. Rapid growth has created the following opportunities:

## **VICE PRESIDENT, PRODUCT DEVELOPMENT**

Direct product development from design to release to production and act as a technical liaison between R&D, Clinical Research, Marketing, and Manufacturing. Requires a Ph.D. in a scientific discipline and a minimum of 12 years related experience in a pharmaceutical environment. Ref. #JB126.

## **QUALITY CONTROL, SENIOR CHEMIST**

Help us establish a modern Quality Control department. Requires a B.S. in life science and 5 years lab analysis. Ref. #EO128.

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

Design, supervise and report drug metabolism/pharmacokinetics studies for new drugs. Requires a Ph.D. in medicinal/pharmaceutical chemistry or a related discipline with 6+ years experience in drug metabolism R&D. Ref. #JS130.

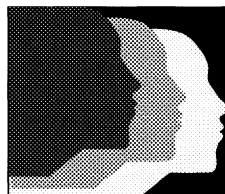
## **ASSOCIATE SCIENTIST, CANCER BIOLOGY**

Characterize lipid signaling pathways in normal and malignant cells. Ph.D. and experience in lipid signaling, structure determinations and protein biochemistry of lipid enzymes required. Ref. #SB131.

CTI is located in downtown Seattle with views of Puget Sound and the Olympic Mountains. We offer an attractive compensation and benefits package and an environment where you can make a significant contribution to medical technology. For consideration, send or fax your CV, indicating the appropriate job reference number, to:

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

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Syntex has earned its reputation in the pharmaceutical industry for significant and innovative research with a continuing commitment to excellence in R&D. Consider this exciting research opportunity working with our Atherosclerosis/Vascular Biology team located in the San Francisco Bay area.

## **Research Scientist Vascular Biology**

Opening for a creative scientist in a new vascular biology program to explore molecular events in atherogenesis. Opportunity to collaborate with groups that maintain animal models, perform morphological evaluations, express and purify target molecules and assist with transgenic animals. Position requires a Ph.D. or M.D./Ph.D., postdoctoral training and 3-5 years' experience in cell and molecular vascular biology. Opportunity to balance drug discovery with basic research and to participate in active post-doctoral program.

Syntex offers a challenging environment, excellent relocation, compensation and benefits package. For immediate consideration, please send your resume to: Syntex Corporation, Job # MCS7419, 3401 Hillview Avenue, Suite A2-130, Palo Alto, CA 94304. Syntex is an equal opportunity employer committed to the values of a diversified workforce.



## **POSTDOCTORAL SCIENTISTS RESEARCH ON MICROBIAL EVOLUTION**

A U.S. - Japan Collaborative Research Project

The National Science Foundation Science Center for Microbial Ecology at Michigan State University seeks postdoctoral scientists to conduct research in cooperation with a team of Japanese scientists. The research is focused on the evolution and distribution of catabolic pathways important in pollutant biodegradation. Scientists are sought from the fields of:

**molecular biology  
enzymology  
microbial ecology**

The individuals selected will conduct research with our collaborators at Nagaoka University of Technology and RIKEN Institute and receive a competitive salary plus cost-of-living adjustment, relocation and housing expenses. These scientist may also leave from and/or return to a postdoctoral position in the Center at Michigan State University. The appointments will be 2-3 years. U.S. citizenship is required. The positions are available immediately and will be open until suitable candidates are found.

To apply, send a letter describing your interests, a curriculum vitae and names of three references to: Dr. Larry Forney, The Center for Microbial Ecology, 540 Plant & Soil Sciences Building, Michigan State University, East Lansing, Michigan 48824-1325.

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## POSITIONS OPEN

University of Rochester School of Medicine and Dentistry NIMH Multidisciplinary program for **PREDOCTORAL AND POSTDOCTORAL RESEARCH** in psychoneuroimmunology. Including behavioral influences on the immune system, neural and endocrine influences on immunity, immune influences on the neuroendocrine system and behavior, ontogeny and phylogeny of neural-immune interactions. For further information: **Dr. Robert Ader, Department of Psychiatry, URM, 300 Crittenden Boulevard, Rochester, NY 14642.** An Affirmative Action/Equal Opportunity Employer. U.S. citizenship or permanent residence required.

**ASSISTANT RESEARCH SCIENTIST—CITY OF HOPE CANCER RESEARCH CENTER:** Ph.D. or D.Pharm./Ph.D. with analytical expertise in oncologic drug pharmacokinetics/pharmacodynamics to expand cancer drug pharmacology core facility of this NCI-designated Cancer Center. Individual should have substantial experience in GC-MS, HPLC, kinetic modeling, and phase I/II cancer clinical trials. Please send curriculum vitae and three letters of recommendation to: **Dr. James H. Doroshow, Director, Department of Medical Oncology and Therapeutics Research, City of Hope Cancer Research Center, 1500 East Duarte Road, Duarte, CA 91010.**

**POSTDOCTORAL FELLOWSHIPS** supported by an NIH-funded research training program are available for July/August 1993, for Ph.D. or M.D. to develop a research career in the multi-disciplinary field of Transfusion Medicine. Areas of investigation include normal and malignant hematopoiesis, pathogenesis of autoimmune and B-lymph proliferative disorders, immunoglobulin gene repertoire development, and biochemistry and cell biology of human blood group antigens. Previous experience in molecular biology and/or cell biology is desirable. Send curriculum vitae and names of three references to: **Leslie E. Silberstein, M.D., Hospital of the University of Pennsylvania, 3400 Spruce Street/6 Founders, Philadelphia, PA 19104.**

**POSTDOCTORAL/RESEARCH ASSOCIATE IN GLYCOBIOLOGY.** A fully funded position for 3 years is available to study the molecular biology of genes for glycosyltransferases and animal lectins. The laboratory is experienced in carbohydrate chemistry and biochemistry and the successful applicant will join an active group in the emerging field of Glycobiology. Candidates should have experience in molecular biology, but no experience in Glycobiology is necessary. Reply to: **Richard D. Cummings, Ph.D., Department of Biochemistry and Molecular Biology, University of Oklahoma Health Sciences Center, P.O. Box 26901, BSEB 325, Oklahoma City, OK 73190.** The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL RESEARCH POSITION** is available immediately to study a new homeodomain transcription factor involved in the expression of neurotransmitter biosynthetic genes in the sympathetic nervous system. Research projects include investigation of the role of this factor during neurogenesis and in human genetic diseases associated with aberrant function of neural crest-derived cells, as well as biochemical and molecular analyses of the DNA-protein interactions. Please send curriculum vitae with three references to: **Elaine Lewis, Department of Molecular and Medical Genetics, L224, Oregon Health Sciences University, Portland, OR 97201; FAX: (503) 494-8393.**

The Biotechnology Patent Examining Group of the Patent and Trademark Office is currently recruiting scientists for positions as **PATENT EXAMINERS.** Individuals with advanced degrees and/or equivalent experience in the fields of immunology, molecular biology, gene therapy, transgenic animals, animal science, biochemistry, protein engineering and microbiology are urged to send a résumé or SF-171 to the following address:

Patent and Trademark Office  
Office of Personnel  
Box 171  
Washington, DC 20231  
K. Clark (180)

For further information, call (703) 308-1123. U.S. CITIZENSHIP IS REQUIRED FOR EMPLOYMENT.

## POSITIONS OPEN

### RESEARCH ASSOCIATE Duke University Medical Center

**POSTDOCTORAL POSITION** available immediately to study the molecular genetics of inherited coagulation disorders and structure-function relationships in coagulation proteins. Experience in molecular biology and biochemistry is desirable. Please send curriculum vitae, list of publications and names of three references to: **Dr. William H. Kane M.D., Ph.D., Department of Medicine, Box 3656, Duke University Medical Center, Durham, NC 27710. FAX: 919-681-6160.** An Affirmative Action/Equal Opportunity Employer.

### RESEARCH ASSISTANT

Position available immediately to study oligopeptides that interact with DNA. B.S./M.S. (including coursework in organic chemistry) and some experience with standard techniques in molecular biology (cloning, footprinting) required. Experience in solid phase peptide synthesis and purification desirable. Rank and salary dependent upon experience. Send curriculum vitae and two letters of reference to: **Stephanie Greene, Department of Chemistry, Princeton University, Princeton, NJ 08544.** Princeton is an Equal Employment Opportunity/Affirmative Action Employer.

### TWO NEW PH.D.-LEVEL POSITIONS BIOCHEMIST AND MOLECULAR BIOLOGIST

The CTCRC Institute for Drug Development (IDD) is a Texas research institution focused on accelerating the development of anticancer agents. IDD is the research arm of the Cancer Therapy and Research Center in San Antonio with research programs in molecular biology, pharmacology, animal model development, and medicinal chemistry. The CTCRC was established in 1974 and currently has about 4000 patient visits per month. The staff often hold appointments at various institutions including participating hospitals and the University of Texas Health Science Center at San Antonio. We are currently seeking a Ph.D.-level biochemist and a Ph.D. molecular biologist who have strong commitments to cancer research and to designing novel therapies, or to improving current treatments. The ideal candidates will have approximately five years of successful experience and will be encouraged to build their own focused research program as well as to interact with and support colleagues in basic research, drug development, and clinical trials. Applicants may send their résumé and salary history to: **Anita Busquets, Institute for Drug Development, 14960 Omicron, San Antonio, TX 78245.** Equal Opportunity Employer. Smoke-free Environment.

### COLUMBIA UNIVERSITY DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOPHYSICS ASSOCIATE RESEARCH SCIENTIST

Three years of postdoctoral experience working with electrostatic theories of macromolecules. Experience in Fortran, C and Unix essential. Should be familiar with Macintosh, NeXT and Silicon Graphics Computers. Also required is experience in developing algorithms to run parallel and vector architectures. Must be familiar with numerical methods pertinent to molecular dynamics and minimization and Monte Carlo search techniques.

Please send 3 letters of recommendation and curriculum vitae to: **Professor Barry Honig, Department of Biochemistry and Molecular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032.**

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### SCIENTIST AND REGULATORY AFFAIRS

Opportunity for scientists with demonstrated success in any of the following: transdermal drug delivery, electrotransport, peptide and parenteral delivery, adhesives and polymers, problems of tissue irritation, clinical trials, electrophysiology and regulatory affairs. Salary commensurate with experience and knowledge. Send curriculum vitae, summary of research and published papers to: **President, D.D.S., P.O. Box 276, Stony Brook, NY 11790-3027.**

## POSITIONS OPEN

**BIOCHEMIST/POSTDOCTORAL RESEARCH FELLOW**—Will study the mechanisms of toxin translocation from the endosomal membrane after receptor-mediated endocytosis. Will focus on identifying intracellular compartment from which translocation of toxin occurs, using synthesis and purification of hybrid toxins, isolation of subcellular particles and study of toxin translocation in a cell-free system. Requires Ph.D. in biochemistry or cell biology and two years (pre- or post-) research experience in the area of receptor-mediated endocytosis. Must have established research ability in the area of receptor-mediated endocytosis as evidenced by research publications in refereed journals. Five day, 40 hours per week, \$26,900 per year. Send résumé in **DUPLICATE** to: **New York State Department of Labor, 111 North Clinton Avenue, Rochester, NY, 14604, Attention: Gary Heiferson.** Refer to NY0503580.

### UNIVERSITY OF UTAH Department of Biochemistry

We seek an experienced **MACROMOLECULAR CRYSTALLOGRAPHER** to join the protein crystallography group in the Biochemistry Department at the University of Utah. The successful candidate will have a Ph.D. and several years of experience. Primary responsibilities for this position will be the maintenance and installation of X-ray equipment, associated computers and software, and the instruction of students and other users. The successful candidate will also undertake research within the protein crystallography group.

Send letter of interest, curriculum vitae and names of three referees to: **Christopher Hill, Biochemistry Department, University of Utah, 50 North Medical Drive, Salt Lake City, UT 84132.**

The close date is May 15, 1993, or until a suitable candidate is identified. *The University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

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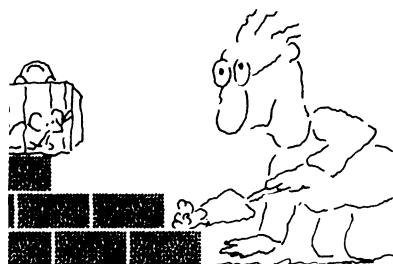
## COURSES & TRAINING

### WORKSHOP ON MOLECULAR EVOLUTION August 8-20, 1993 Marine Biological Laboratory

A series of lectures and discussions exploring multiple approaches to molecular evolution, with a computer laboratory for phylogenetic and sequence analysis. Current topics in molecular evolution including the theoretical basis for comparative sequence analysis and phylogenetic tree construction will be addressed. Enrollment limited to 60 students. **Director:** Mitchell L. Sogin, Marine Biological Laboratory. **Faculty:** P. Argos, European Molecular Biology Laboratory; D. Davison, University of Houston; M. Donoghue, Harvard University; J. Felsenstein, University of Washington; W. Fitch, University of California, Irvine; J. Hein, Aarhus University, Denmark; M. Kreitman, University of Chicago; L. Landweber, Harvard University; D. Maddison, University of Arizona; R. Milkman, University of Iowa; G. Olsen, University of Illinois; J. Ostell, National Library of Medicine; P. Riley, Yale University; M. Riley, Marine Biological Laboratory; J. Shapiro, University of Chicago; T. Speed, University of California, Berkeley; D. Swofford, Smithsonian Institution; B. Walsh, University of Arizona; and L. Zimmer, Smithsonian Institution. **Tuition:** \$650; includes room and board. **Application Deadline:** June 1, 1993. **Contact:** Dorianne Chrysler, Educational Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543. Telephone: (508) 548-3705, Extension 401.



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## Biomedical Scientist/Postdoc

### Protein Crystal Growth

The Biology and Biotechnology Research Program (BBRP) at Lawrence Livermore National Laboratory is seeking a scientist/postdoctoral fellow with experience in protein crystal growth to join its expanding Structural Biology Research Group.

The applicant should be able to participate in design, setup and operation of a protein crystallization laboratory. Preference is given to persons experienced in protein-DNA complexes (protamine, repair enzymes, polymerases etc) with a substantial record of success in protein crystallogenesis. She/he will work closely together with protein chemists, crystallographers and NMR specialists, and should be able to operate well in a team and interact extensively with other scientists. The applicant will be given an opportunity to resume or develop individual projects as well. BS/MS/PhD degree required in a scientific or related field.

The BBRP offers excellent research facilities and a competitive salary and benefits program. Rank, position and salary are open dependent on the applicant's qualifications. For more information contact: Dr. Bernhard Rupp, Structural Biology Group, at (510) 422-3261 or FAX (510) 422-2282. Interested applicants are invited to send their CVs including references to: Ms. Quincy McClain, Professional Employment Division, Lawrence Livermore National Laboratory, P.O. Box 5510, L-725, Dept. A93206BI, Livermore CA 94551. We are proud to be an Equal Opportunity Employer M/F/D/V.

University of California

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**GENSIA PHARMACEUTICALS, INC.** believes attracting and retaining top notch scientists is essential. We are committed to an environment that encourages professional growth and individual career development. The rapid expansion of our publicly-traded biopharmaceutical company has created career opportunities for highly motivated scientists interested in joining our multi-disciplinary groups located in San Diego. We are involved in the rational design of drugs targeted at enzymes important in metabolism. Our research programs are focused in the area of cardiovascular, central nervous system, inflammation, and diabetes.

#### CURRENT RESEARCH OPPORTUNITIES

**Medicinal Chemistry**—PhD level candidates should possess 1–5 years of experience in organic chemistry in a pharmaceutical company, be familiar with all analytical techniques and capable of conducting independent research. Experience in computational chemistry is desirable. CODE: WSC/ME

**Analytical Chemistry**—Candidates at the MS and PhD level with extensive experience in both analytical and preparative HPLC and knowledge of synthetic organic chemistry will be considered. Knowledge of regulatory procedures and experience in other analytical methods is desirable. Code: WSC/GC

**Biochemistry**—PhD level candidates in Biochemistry, Cellular Pharmacology, Cell Biology or Genetics with comprehensive knowledge of intermediary metabolism and extensive experience in studies with cultured and isolated cells will be considered. Special consideration will be given to applicants with experience in signal transduction or engineering metabolic pathways. CODE: WSC/JA

**Immunology**—A PhD in Pharmacology/Immunology or related field plus minimum of 3 years postdoctoral training is required, including experience in *in vivo* models of inflammation, immunostaining and routine histologic techniques. Drug discovery and industry experience is an advantage. Code: WSC/GF

**Process Chemistry**—PhD level candidates in Organic Chemistry should possess 3–5 years postdoctoral experience in process chemistry working with a pharmaceutical company. Candidates will have experience in the design and implementation of synthetic chemical processes, including large scale synthesis and optimization of multistep synthetic sequences for the development of drug candidates. Knowledge of nucleoside chemistry is desirable. CODE: WS/MEPC

**Gensia Pharmaceuticals, Inc. offers competitive salaries, comprehensive benefits including a stock option program, and a stimulating work environment. We invite qualified candidates to send a CV to Human Resources 11025 Roselle Street, San Diego, CA 92121–1204, or fax to 619/622-5540. Please indicate code for the position you are applying for.**

**Gensia Pharmaceuticals, Inc. is proud to offer equal employment and a culturally diverse workplace to everyone.**



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This senior leadership position, reporting to the Executive Director, Process Development, offers management of a comprehensive recombinant protein based pharmaceutical development effort, including multiple products and product forms. Focus will be on coordination of development efforts with other functional groups and will require frequent contact with upper management. Requires a Ph.D. in Biochemistry, Pharmaceutical Sciences or a related field plus a minimum of 5 years relevant industrial experience including protein characterization, purification or formulation and significant research project management experience. Dept. #539.

### Research Associate/Scientist

Responsibilities include performing studies on bulk and formulated protein based pharmaceuticals, development of dosage forms for clinical and commercial use, development of appropriate final product testing methodologies and designing and conducting stability studies for regulatory filing. Requires at least a B.S. in the biological sciences with a minimum of 4 years of industry experience; formulations and protein pharmaceuticals experience desirable. Dept. #358.

Somatogen is located in picturesque Boulder, Colorado, and enjoys a variety of recreational and cultural activities. We also offer a competitive salary, relocation and benefits package. Interested candidates may submit their resume indicating Dept. number and position desired to:

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## Arctic Research Consortium of the United States, Inc.

The Arctic Research Consortium of the United States (ARCUS) is seeking a highly qualified individual to serve as its President and Chief Executive Officer. ARCUS is a national non-profit corporation, consisting of member institutions involved in arctic research and education. ARCUS provides leadership in and promotion and facilitation of these activities.

The President provides leadership for the Consortium, is responsible to its Board of Directors, manages the affairs of ARCUS, and supervises its staff. The President recommends and implements the programs and policies established by the Board of Directors; develops and administers ARCUS programs and activities; represents the corporation in contract, grant, and financial negotiations with government and private funding and banking entities; and interacts with the arctic research community to assess and advance its needs and priorities. The President represents ARCUS interests and concerns to other groups and organizations to ensure that quality programs and services exist to meet the needs of the arctic research and education community.

Applicants are required to have a Ph.D. or its equivalent. Applicants should also have at least five years of experience in the design and conduct of research in the Arctic and at least five years of experience in the design and management of interdisciplinary research. Demonstrated excellence in the ability to communicate and function effectively with diverse constituencies within the scientific and education community, the policy making community, and the general public is highly desirable. Successful experience in the preparation, negotiation, and management of grants and contracts, as well as in direct responsibility for fiscal management, is a must.

Salary will be negotiated. ARCUS offers a competitive benefits package. ARCUS is currently based in Fairbanks, Alaska.

Send applications, including curriculum vitae and four references, for receipt by 15 May 1993, to:

President Search Committee  
Dr. Mark F. Meier, Chair  
ARCUS, Inc.  
600 University Avenue, Suite B  
Fairbanks, AK 99709

ARCUS is an Equal Opportunity, Affirmative Action Employer and invites and encourages applications and nominations from women and under-represented minorities.

## NATURAL RESOURCES AND ECOLOGY ARGONNE NATIONAL LABORATORY

Argonne National Laboratory seeks candidates to fill two positions:

A **Resource Scientist** is needed whose primary training and background is in the application of remote sensing and geographic information systems (GIS) to studies of natural systems. The person selected will apply these skills in environmental assessment studies and develop a research program utilizing advanced techniques in spatial modeling, GIS and remote sensing. Candidates must have strong writing, analytical, project leadership, and program development skills with a record of open literature publications. A Ph.D. in ecology, natural resource management or related discipline is required. A computer laboratory with ERDAS, ARC/INFO, GRASS and other software operating on UNIX workstations will be available to the selected candidate. **Reply to Box # 94236, 94237.**

An **Ecologist** is needed to participate in a multi-disciplinary team conducting environmental assessments and research on a variety of natural resource issues. A Ph.D. in ecology or related field is required. Strong writing, computational and statistical skills are necessary. **Reply to Box # 105887.**

Applicants should reference the applicable box number and submit their curriculum vitae, the names and addresses of three technical references, and a short statement of research interests by May 16, to: Susan M. Walker, Employment and Placement, Box EID- (insert appropriate box #- 55), Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Argonne is an equal opportunity affirmative action employer.



## Biopharmaceutical R&D



Interferon Sciences (ISI) is a leading biopharmaceutical company, located at the heart of the pharmaceutical industry in central New Jersey. ISI focuses on the development of therapeutic products using state of the art technology. ISI is currently manufacturing natural human leukocyte interferon, approved by the FDA for treatment of viral diseases. The Research & Development Department has positions open, at postdoctoral, MS and BS levels, in three primary areas: cell biology, protein biochemistry and molecular genetics.

### Cell Biology

Biologists with experience in mammalian cell culture, cytokine bioassay, immunoassay, production and purification of antibodies and virology. (RD-93CB)

### Protein Biochemistry

Biochemists with experience in characterization and purification of glycoproteins, carbohydrate analysis, and protein chemistry. (RD-93PB)

### Molecular Genetics

Molecular biologists with experience in PCR, DNA sequencing, DNA/RNA detection, subcloning, and gene expression (RD-93MG)

Interferon Sciences offers an excellent compensation and benefit packages. Qualified candidate should send his or her resume with the appropriate position code, to: **Personnel Department, INTERFERON SCIENCES, INC., 783 Jersey Avenue, New Brunswick, NJ 08901.**



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## PHARMACOKINETICS/ DRUG METABOLISM LEADERSHIP OPPORTUNITIES

Alcon Laboratories, Inc., with sales over \$1 billion, has the distinction of possessing the world's most sophisticated ophthalmic research laboratories which lead the industry in the discovery and development of a wide variety of prescription, OTC, and surgical products. Two positions have been created to lead the following units.

### BIOANALYTICAL

The successful candidate will supervise a group responsible for HPLC and GC method development/validation and the analysis of samples for preclinical and clinical pharmacokinetics studies. Hands-on analytical skills, experience with GLP aspects of bioanalytical laboratory operation and a sound knowledge of pharmacokinetics will be critical assets.

### DRUG METABOLISM/ ADME

Primary responsibilities include supervision of preclinical pharmacokinetic, drug metabolism, ocular bioavailability and biodistribution studies. Background and skills should enhance *in vivo* and *in vitro* drug metabolism capabilities. In addition to conducting studies supporting global submissions, the individual will serve as an interface with drug

discovery functions and will implement collaborative research activities.

Position titles will be commensurate with experience and both positions will be accountable for staff management and development, and will serve on multi-disciplinary drug development teams. Selection criteria include: Ph.D., 5 years drug industry experience in respective areas with significant supervisory accomplishments. Excellent oral and written communication skills are essential.

Located in  **Ft. Worth, Texas**, Alcon offers you both personal and career rewards, including competitive salary/benefits, relocation assistance and recreational, cultural and economic advantages indigenous to the Sunbelt. Please send C.V. and cover letter indicating current salary and how you meet each of the selection criteria to: Alcon Laboratories, Inc., Placement and Development, T1-3, PK/DM, P.O. Box 6600, Ft. Worth, TX 76115.

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## Eleven Post-Doctoral Positions Available at the Walther Oncology Center Indiana University School of Medicine

The Walther Oncology Center was established in 1988 at the Indiana University School of Medicine. It is composed of a highly interactive, interdepartmental group of productive principal investigators with primary and secondary faculty appointments in the Medical School.

The goals of the Walther Oncology Center are to understand the cellular and molecular control of normal cell growth and differentiation, the abnormalities in these controls which are associated with initiation and progression of cancer, and to transfer this information as quickly as possible into the preclinical and clinical setting to increase efficacy of treatment.

Applications are invited for the 11 positions, immediately available, one with each of the members of the Walther Oncology Center listed below. The environment is friendly and conducive for a high level of productivity.

**H. Scott Boswell**, Associate Professor; M.D., University of Virginia, 1977. Coupling between p21RAS-dependent and retinoblastoma signaling pathways with transcription control elements. *Blood* (1992) 79: 2404; *Leukemia* (1992) 6:796; *Leukemia* (1991) 5:1099; *Cell Signaling* (1991) 3:311.

**David B. Donner**, Professor; Ph.D., Rensselaer Polytechnic Institute, 1972. Signal transduction through receptors for tumor necrosis factor, *J. Biol. Chem.* (May/June 1993) in press; *Biochem. J.* (1993) 290:185; *J. Biol. Chem.* (1991) 266:2685; *J. Biol. Chem.* (1990) 265:18590.

**Mark G. Goebel**, Assistant Professor; Ph.D., University of Chicago, 1985. Role of ubiquitin conjugation in cell cycle control. *Nature* (1992) 357:700-702; *EMBO J.* (1992) 3091; *Trends Biochem. Sci.* (1991) 16:173; *Science* (1988) 241:133.

**Maureen A. Harrington**, Assistant Professor; Ph.D., University of North Carolina, 1985. Myogenic differentiation; Molecular biology of colony stimulating factor-1. *Cell Growth Diff.* (1992) 3:241; *Gene* (1991) 102:165; *Mol. Cell. Biol.* (1990) 10:4948; *Mol. Cell. Biol.* (1988) 8:4322.

**Robert Hromas**, Assistant Professor, M.D., University of Texas, 1984. The molecular control of normal and leukemic blood cell development. *J. Biol. Chem.* (1993) 268:5769; *Biochim. Biophys. Acta* (1993) 1172:155; *J. Exp. Med.* (1991) 174:1097; *J. Biol. Chem.* (1991) 266:14183.

**Michael J. Klemsz**, Assistant Professor, Ph.D., University of Colorado, 1987. Regulation of gene expression in the immune system, ETS-domain transcription factors. *J. Biol. Chem.* (1993) 268:5769; *Science* (1993) 259:1622; *Biochim. Biophys. Acta* (1993) 1172:155; *Cell* (1990) 61:113.

**Byoung S. Kwon**, Associate Professor, Ph.D., Medical College of Georgia, 1981. T-cell costimulatory molecules and immunotherapy of human cancers. *J. Immunol.* (1993) 150:771; *J. Invest. Dermatol.* (1993) 100:134S; *PNAS* (1991) 88:9228; *J. Exp. Med.* (1991) 173:813.

**David Lebowitz**, Associate Professor, M.D., Columbia, 1977. BCR/ABL gene regulation, BCR/ABL transformation and signal transduction, chronic myelogenous leukemia, cancer cytogenetics. *Blood* (1993) 81:801; *Leukemia* (1992) 6:796; *Genes, Chrom. and Cancer* (1991) 3:308; *Leukemia Research* (1991) 15:65.

**Li Lu**, Senior Scientist, M.D., Shanghai First Medical College, P.R. China, 1962. Purification, characterization, regulation and gene transduction of hematopoietic stem and progenitor cells. *Blood* (1993) 81:41; *Int. J. Cancer* (1992) 52:261; *Exp. Hematol.* (1992) 20:418; *J. Immunol.* (1988) 141:201.

**Mark S. Marshall**, Associate Professor, Ph.D., Princeton, 1986. Structure/function studies of oncogenic *ras* p21, *ras*GAP and protein isoprenyltransferases. *Oncogene* (1993) 8:425; *J. Biol. Chem.* (1992) 267:20589; *Mol. Cell. Biol.* (1991) 11:3997; *Cell* (1991) 64:625.

**Yu-Chung Yang**, Associate Professor, Ph.D., Northwestern University, 1981. Control mechanisms of gene expression and signal transduction of human interleukin (IL)-9 and IL-11. *J. Biol. Chem.* (1992) 267:8347; *J. Exp. Med.* (1992) 175:211; *Genomics* (1992) 13:814; *PNAS* (1990) 87:7512.

If applicants have a preference for a position with one or more of the above-listed faculty, this should be mentioned in a cover letter. Applicants should send this with their curriculum vitae and names of three references to:

Hal E. Broxmeyer, Ph.D.  
Mary Margaret Walther Professor of Medicine  
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## MEETINGS

**INTERNATIONAL SYMPOSIUM ON CELLULAR & MOLECULAR BIOLOGY OF PHOSPHATE & PHOSPHORYLATED COMPOUNDS IN MICROORGANISMS,** September 12-17, 1993, in Woods Hole, Massachusetts. Sponsored by IUBMB. For registration (\$225 including Book of Reports by ASM Publisher) contact: Annamaria Torriani, MIT Biology 16-713, Cambridge, MA 02139; Telephone: 617-253-5135; FAX: 617-253-8699. Sessions: Regulation of Phosphate Metabolism and Transport of Phosphorylated Compounds. Phosphate Regulation in Pathogenesis and Secondary Metabolism (antibiotics). The Phosphotransferase System. Polyphosphates and Phosphate Reserves. Phospholipids and Protein Export. Signal Transduction and Phosphoproteins.

## ANNOUNCEMENTS

### HEALTH EFFECTS INSTITUTE AVAILABILITY OF HEI RESEARCH REPORT Nitrogen Dioxide and Respiratory Illness in Infants

The Health Effects Institute (HEI) announces that a preprint of Research Report Number 58, *Nitrogen Dioxide and Respiratory Illness in Children—Part I and Part II*, is available to organizations and individuals who need it for regulatory purposes. The Report contains the results of an epidemiologic investigation by Dr. Jonathan Samet and colleagues, of infants and toddlers in Albuquerque, New Mexico, and the HEI Review Committee's Commentary on the study.

A preprint of the Report was released to the U.S. Environmental Protection Agency in advance of its scheduled publication in order to make its contents available for the Agency's analysis on the air quality criteria for oxides of nitrogen. Only persons requiring a preprint of Research Report Number 58 or needing additional information should contact: Dr. Kathleen M. Nauss, Health Effects Institute, 141 Portland Street, Cambridge, MA 02139. FAX: (617) 621-0267 or Telephone: (617) 621-0266.

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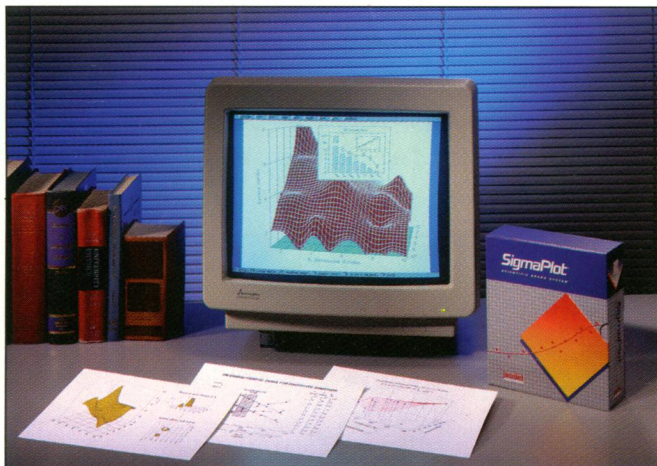
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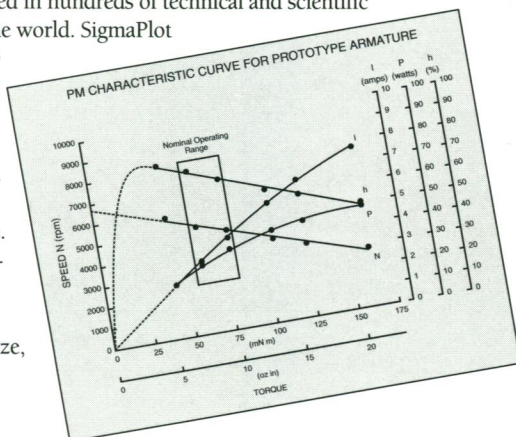


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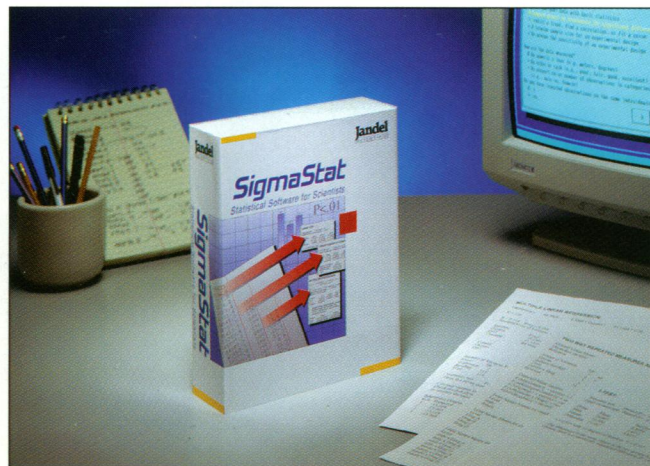
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Low Dose vs High Dose	9.501	2	8.634	Yes					
Low Dose vs Control	4.054	3	3.953	Yes					
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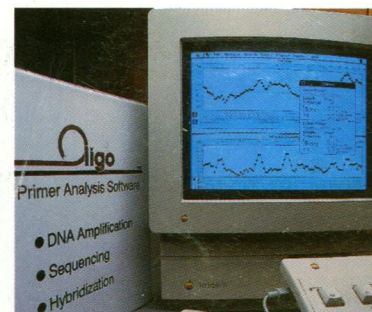
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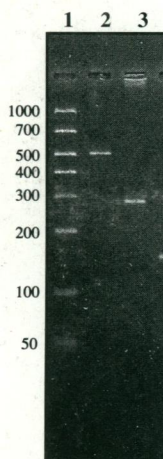
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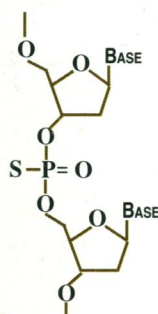
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