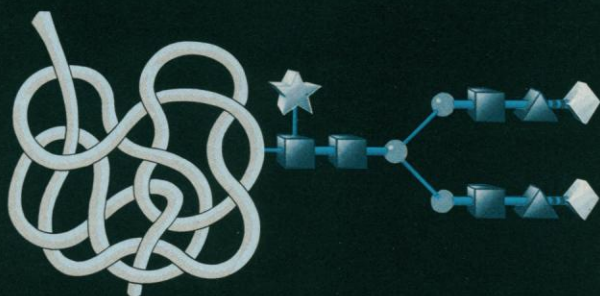


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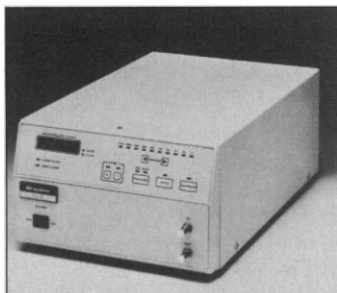


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The Bio Image ScanMaster 3+ Scanner is a high-resolution flatbed scanner for use with automated electrophoresis analyzers. The ScanMaster is a white light scanner with comparatively high resolution (25  $\mu$ m or 1200 dpi) for resolving bands at the top of dense DNA sequencing films or to scan objects on 35-mm electrophoresis gels. It has transmissive and reflective scanning capabilities for scanning films, gels, and membranes. It accepts most standard sequencing films and is compatible with a wide range of visualization techniques including silver stains, Coomassie blue, and autoradiography. Millipore. Circle 90.

## DNA Quantitation Kit

The QUICK-LIGHT Nano-Blot Kit provides a sensitive procedure to quantitate human DNA in small samples. The 90-min pro-

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## Camera Luminometer

The Camera Luminometer is an inexpensive and convenient device for recording chemiluminescent and bioluminescent assays such as Northern (RNA) blots, Southern (DNA) blots, and protein immunoblots. Transfection studies involving luciferase vectors, dot blots, or assays in a liq-



uid format with alkaline phosphatase probes can also be analyzed. The device makes use of Polaroid instant film and comes with a choice of four different sample trays that have been designed to accommodate either a gel, a blot, or liquid samples. Integrated Separation Systems. Circle 92.

## Literature

*Sigma Techware: Laboratory Equipment and Supplies 1992-93* features more than 400 new products including an expanded filtration line. Sigma Chemical Co. Circle 93.

*Pump-Controlled HPLC Systems* describes high-performance liquid chromatography systems for gradient and isocratic applications. The programmable Gilson 305 Pump functions as a system controller and eliminates the need for a computer controller. Gilson Medical Electronics. Circle 94.

*Cell Robotics Laser Tweezers 1000 Series* describes an optical trapping system for the manipulation of microscopic particles, living cells, and chromosomes. Cell Robotics. Circle 95.

*Rat Marker Range* is a mailing list to keep laboratories informed of new antibodies added to a line that currently includes more than 60 rat specificities. Serotec. Circle 96.

*Area Detector Systems* presents two-dimensional x-ray detection equipment for a wide range of large molecule single-crystal, polymer, protein, and virus studies, including AIDS research. Siemens Industrial Automation. Circle 97.

*Directory of CD-ROM Databases 1992* covers the categories of business; food and agriculture; academic; health, safety, and the environment; health sciences; science and technology; and independent support software. SilverPlatter Information. Circle 98.

*It Shows What Molecules Do* describes the BIAcore system for label-free real-time biospecific interaction analysis. The system saves time by eliminating the need to purify and label interacting biomolecules and providing a diversity of information otherwise obtainable only through assay procedures. Pharmacia. Circle 99.

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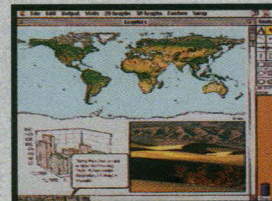
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**ECOLOGY POSITION.** The School of Biological Sciences invites applications for a tenure-leading faculty position at the **ASSISTANT PROFESSOR** level in the area of Plant/Animal Interactions. Research expertise in chemical ecology, physiological ecology or genetic and evolutionary aspects of plant/animal interactions is particularly sought. The candidate is expected to develop a vigorous research program and assume teaching responsibilities in both undergraduate and graduate level courses in ecology and biology. A Ph.D. required; post-doctoral experience preferred. Send curriculum vitae, statement of research interest, recent reprints and the names and phone numbers of three references by October 15 or until a suitable candidate is selected to: **Dr. T. Jack Morris, Director, School of Biological Sciences, 348 Manter Hall, University of Nebraska-Lincoln, Lincoln, NE 68588-0118.**

*The University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples.* If you require a reasonable accommodation in order to apply or interview for this position, please contact Dr. T. Jack Morris at the above address.

**PLANT BIOCHEMIST/MOLECULAR BIOLOGIST.** The Department of Chemistry and Biochemistry at New Mexico State University (NMSU) invites applications for a tenure track faculty position (**ASSISTANT PROFESSOR**) effective August 1993. The successful candidate will establish an externally funded research program at the interface between biochemistry and molecular/cell biology in a higher plant; will have a Ph.D. degree and postdoctoral experience with preference given to candidates with an advanced degree in chemistry or biochemistry; will have primary teaching responsibility for lecture and laboratory courses in nucleic acid biochemistry and be expected to teach introductory biochemistry or chemistry when needed. The department offers B.S. degrees in Biochemistry and Chemistry and M.S. and Ph.D. degrees in Chemistry. M.S. and Ph.D. degrees are also offered through the interdisciplinary Molecular Biology Program. Applicants should submit a letter of application, a complete curriculum vitae, copies of transcripts (undergraduate and graduate), statements of research and teaching interests, start-up costs, and three letters of recommendation to: **Dr. Peter J. Lambers, Search Chairman, Box 30001, Department 3C, NMSU, Las Cruces, NM 88003-0001.** The deadline for receipt of all materials is October 30, 1992. *NMSU is an Equal Employment Opportunity/Affirmative Action Employer. Offer of employment is contingent upon verification of individual's eligibility for employment in the United States.*

### PHYSIOLOGICAL ECOLOGIST

The Department of Biological Sciences, Dartmouth College, invites applications for a tenure track **ASSISTANT PROFESSOR** position in Physiological Ecology, to begin fall 1993. We seek candidates studying the physiological ecology of plants, animals, or plant-animal interactions in terrestrial environments. Research should be at the organismal level, but directed towards understanding patterns or processes at the population, community, or ecosystem levels. Individuals addressing fundamental research questions and/or questions relevant to environmental issues are encouraged to apply. The successful candidate will be expected to establish a vigorous, externally-funded research program and to teach at the undergraduate and graduate levels.

Ph.D. and postdoctoral experience required. Submit curriculum vitae, statement of research and teaching interests, three recent reprints, and three letters of reference to: **Ecology Search Committee, Department of Biological Sciences, Dartmouth College, 6044 Gilman, Hanover, NH 03755-3576. FAX (603) 646-1347.** Review of applications will begin on 15 October 1992. *Dartmouth is an Equal Opportunity/Affirmative Action Employer.*

**PATHOLOGY—CLINICAL MICROBIOLOGY.** The Department of Pathology, University of Virginia School of Medicine, is seeking an M.D. or Ph.D. Clinical Microbiologist at the **ASSISTANT OR ASSOCIATE PROFESSOR** level with a funded or fundable research program. Send letters of inquiry with curriculum vitae and names of three references to: **Dieter H.M. Gröschel, M.D., Department of Pathology, Box 214, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**IMMUNOLOGIST/MICROBIOLOGIST**—a tenure-track opening at the **ASSISTANT PROFESSOR** level beginning Fall of 1993 funded by a grant from the Howard Hughes Medical Institute. All applicants should be able to teach both at the introductory and advanced levels and should be qualified to establish a funded cell-culture facility. Broad training in biology, appreciation for the liberal arts tradition in education, and commitment to research involving undergraduates are very desirable. 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 November 1, but applications will be accepted until suitable candidates are found. Send letter of application, curriculum vitae, transcripts, and three letters of reference to **Dr. Henrietta Croom, Biology Department, The University of the South, Sewanee, TN 37375.** *Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**ASSISTANT PROFESSOR, TERRESTRIAL ECOLOGY.** The Department of Zoology, University of Wisconsin-Madison, is seeking candidates for a tenure-track position in terrestrial ecology. Successful candidates must demonstrate ability to conduct a vigorous research program and show excellent potential for undergraduate and graduate teaching. We encourage applicants working at all spatial scales, from local to landscape. Send curriculum vitae, three letters of reference, and research and teaching statements by October 15, 1992, to **Search Committee, Department of Zoology, UW-Madison, Madison, WI 53706.** Unless confidentiality is requested in writing, applicant information must be released upon request. Finalists cannot be guaranteed confidentiality. *The UW-Madison is an Equal Opportunity/Affirmative Action Employer.*

## NEUROSCIENCE

### MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL

The Department of Neurobiology at the Massachusetts General Hospital is recruiting basic science faculty in neurobiology. The search is being conducted jointly with the Department of Neurobiology at Harvard Medical School and successful candidates will hold appointments in both departments. Laboratory space will be located at the Massachusetts General Hospital as part of a basic science research group there. We intend primarily to recruit candidates at the **ASSISTANT PROFESSOR** level, although more senior candidates may also be considered. Two and possibly three appointments will be made. The primary scientific area of interest is cellular neurobiology, especially as approached with molecular techniques.

Applicants should submit curriculum vitae, a brief statement of current research (including reprints, if available) and future plans, and the names of three individuals who might write on their behalf to:

**Gerald D. Fischbach, M.D.  
MGH Neuroscience Search  
Harvard Medical School  
Department of Neurobiology  
220 Longwood Avenue, B2-420  
Boston, MA 02115**

*Women and minority candidates are encouraged to apply. The Massachusetts General Hospital and Harvard Medical School are Affirmative Action/Equal Opportunity Employers.*

### ASSISTANT/ASSOCIATE PROFESSOR ENDOCRINOLOGY

The Department of Physiological Science at UCLA is seeking applicants for a tenure-track position, beginning Fall of 1993. Areas of interest include but are not limited to molecular aspects of hormone action, neuroendocrinology, and organismal or systemic endocrinology. Applicants must be able to establish an active research program and to teach endocrinology to undergraduates and graduate students. Submit curriculum vitae, statement of present and future research interests, and three letters of evaluation by November 1, 1992 to: **Professor Gordon L. Fain, Chair, Endocrinology Search Committee, Department of Physiological Science, Jules Stein Eye Institute, University of California Los Angeles, Los Angeles, CA 90024-7008.** *The University of California is an Equal Opportunity Employer and encourages applications from women and members of minorities.*

## POSITIONS OPEN

### ASSISTANT PROFESSORSHIP

The Departments of General Surgery and Tumor Biology at the University of Texas M. D. Anderson Cancer Center are developing a strong program in the molecular aspects of soft tissue sarcoma proliferation and metastasis. A full-time, tenure-track position is available as a joint appointment in these Departments. We are seeking an outstanding individual who has expertise in tumor cell biology, tumor biochemistry, tumor molecular biology or other fields relevant to soft tissue sarcoma proliferation, invasion, and metastasis. Candidates should have a doctoral degree and postdoctoral experience and should demonstrate exceptional potential in research and graduate teaching. Level of appointment will be commensurate with previous experience and accomplishments. Applicants should include curriculum vitae, names and telephone numbers of at least five references and a 1- to 2-page statement of current research activities and future interests to either **Raphael E. Pollock, M.D., Ph.D., Deputy Chairman (Research), Department of General Surgery—Box 106, University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030,** or to **Garth L. Nicolson, Ph.D., Chairman, Department of Tumor Biology—Box 108, University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** *The University of Texas is an Equal Opportunity/Affirmative Action Employer. Smoke-Free Environment.*

### ASSISTANT PROFESSOR DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOPHYSICS

The Department of Biochemistry and Molecular Biophysics is seeking applicants who will establish an independent research program in mammalian molecular genetics, molecular or cellular biology with expertise in the genetics of development. Nucleic acid-protein and/or transgenic techniques preferred. The applicant must hold a Ph.D. or equivalent degree in molecular biology, biochemistry, biology, or related medical discipline with a minimum of two years of postdoctoral training and a record of publication and presentation. The applicant will participate in an interdisciplinary program involving molecular genetics, molecular and cellular biology and include graduate and professional teaching programs of the department. A full job description will be provided on request. Send curriculum vitae, a description of research plans and letters from 3 references to: **Dr. Robert K. Yu, Chairman, Search Committee, Department of Biochemistry and Molecular Biophysics, Box 614, MCV, Virginia Commonwealth University (VCU), Richmond, VA 23298-0614** by October 15, 1992. *VCU is a culturally diverse Equal Employment Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.*

### STANFORD UNIVERSITY FACULTY POSITION IN INFORMATION STORAGE MATERIALS AND DEVICES

The Departments of Materials Science and Engineering and Electrical Engineering (EE) invite applications for a tenure track faculty position in the area of magnetic or optical information storage. A Ph.D. and a strong interest in graduate and undergraduate teaching are required. The research activities of this individual should focus on the science and technology of information storage materials and devices and might embrace magnetic thin films, magneto optic materials, optical storage materials, or other relevant materials and techniques. The successful candidate will be embedded in an environment with substantial activities in surface and interface science, magnetism, solid state physics, advanced optics, information science and nanostructure science and technology and have an interest in the fundamentals and applications of both materials and devices. The opening is at the **ASSISTANT PROFESSOR** level. The appointment will be made either in the MS&E Department or the EE Department. Please send a complete résumé, a publication list, a statement of research and teaching interests, and the names of three references to: **Professor Robert L. White, Department of Materials Science and Engineering, MS 2205, Stanford University, Stanford, CA 94305,** by December 1, 1992. *Stanford University is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.*



## RESEARCH ASSOCIATE

The Alberta Peptide Institute is seeking a highly motivated scientist for the position of Facility Manager. This unique position has a variety of duties and responsibilities that include:

- directing all research efforts;
- supervision of technical personnel;
- all organizational and administrative aspects of the institute.

The ideal candidate would possess the following:

- a Ph.D. and a strong background in biochemistry and organic chemistry;
- 1-2 years of experience in a solid-phase peptide synthesis laboratory;
- exceptional communication, organization, and management skills.

The Alberta Peptide Institute is a cost-recovery core facility dedicated to providing peptide products and services to the Canadian University research community. Our research efforts and services include preparation of synthetic peptides and synthetic peptide-conjugates, protein sequencing, amino acid analysis, HPLC and mass spectrometry of biomolecules. We offer competitive salaries and an excellent benefits package (\$33,951 to \$45,691 depending on qualifications and experience). Closing date for this position is September 30, 1992. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. An interested applicant should send his or her C.V. and direct three letters of reference to:

Dr. Robert S. Hodges  
Department of Biochemistry  
University of Alberta  
Edmonton, Alberta, Canada  
T6G 2H7

The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities and women.

## RESEARCH ASSOCIATE POSITIONS

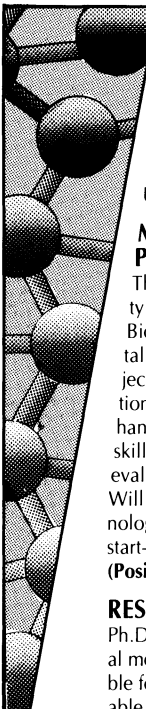
RESEARCH ASSOCIATE OPPORTUNITIES are periodically available with the COLLEGE OF BIOLOGICAL SCIENCES at the UNIVERSITY OF MINNESOTA. Positions may be available in the Departments of Biochemistry; Ecology Evolution and Behavior; Plant Biology; and Genetics & Cell Biology. Positions may also be available in the Bell Museum of Natural History, the Gray Freshwater Biological Institute, the Biological Process Technology Institute, the Lake Itasca Forestry and Biological Station and the Plant Molecular Genetics Institute.

These positions are for independent research. To be considered, applicants must hold a Ph.D. degree or foreign equivalent and at least two years of postdoctoral experience. Applicants are encouraged to secure salary support from an external granting agency. Multiple positions may be available, depending upon space and facilities, availability of funding, as well as faculty research interests.

Applications from interested persons must include a personal vitae, a statement of research interests and experience, names, addresses, and telephone numbers of three references, and specification of departments/programs of interest.

Closing date for applications to be received is June 30, 1993. Direct application material to: Associate to the Dean, College of Biological Sciences, University of Minnesota, 123 Snyder Hall, 1475 Gortner Avenue, St. Paul, MN 55108. The University of Minnesota is an equal opportunity educator and employer.

UNIVERSITY OF MINNESOTA



CELGENE CORPORATION is a company focused on the science of biocatalysis, synthesizing and degrading chemical compounds through the use of microbes and microbial enzymes. Our success in the area of pollution prevention has led to increased staffing requirements within our Biotreatment Systems Unit.

### MANAGER, PROCESS ENGINEERING R&D

This position represents the leadership role for feasibility testing and pilot scale field operations within our Biotreatment Unit. We require a chemical/environmental engineer with 5+ years in process development/project management with experience in microbial degradation of organic compounds. This individual must be a hands-on operational leader with the strong interpersonal skills needed to supervise a multi-disciplinary team in the evaluation of candidate process streams for biotreatment. Will be responsible for the transfer of biotreatment technology from basic R&D through fabrication, installation, start-up and field service of pilot scale bioreactor systems. (Position #35)

### RESEARCH MICROBIOLOGIST

Ph.D. Microbiology/Biochemistry with emphasis in bacterial metabolism, physiology, or biochemistry to be responsible for isolation and characterization of microorganisms able to degrade priority pollutants. This individual will conduct a basic research program to describe biodegradative pathways, and will extensively interact with R&D engineers for scale-up and field trials of novel biotreatment systems. (Position #18)

### RESEARCH ENGINEER

Ph.D. Chemical/Biochemical Engineer with experience in bio/process research and development to be responsible for development of novel in-process bioreactor systems. Will interact with process engineering R&D in troubleshooting and optimizing bioreactors and unit operations from lab scale-up to pilot. (Position #33)

### CHEMICAL FIELD ENGINEER

BS/MS Chemical Engineer with 3+ years' experience in field operation of pilot and full scale treatment units. Responsibilities include start-up, operation, and troubleshooting of biotreatment units at the client's site. Travel required. Experience in chemical industry preferred. (Position #1)

### ANALYTICAL CHEMIST

BS/MS Analytical Chemist with 3+ years' industrial or research experience with chromatographic and spectrophotometric analyses. Responsible for methods development and performing analytical assays on priority pollutants at ppb levels in environmental samples. Organic chemistry/biochemistry background helpful. (Position #34)

### MICROBIOLOGISTS/BIOCHEMISTS

To qualify, we require individuals with a BS/MS in Microbiology/Biochemistry or related area, a background in microbial physiology, nutrition and biochemistry, experience in the use of GC, HPLC, spectrophotometers and bacterial/fungal culture techniques. (Position #30)

We offer a competitive salary/benefits package and state-of-the-art facilities located in Central NJ, one hour between NYC and Philadelphia. Please send your resume and salary requirements, indicating position # to: **Human Resources Manager, Dept. SCI, Celgene Corporation, 7 Powder Horn Drive, Warren, NJ 07059. EOE M/F.**





## National Institutes of Health (NIH)

### ASSOCIATE DIRECTOR FOR COMMUNICATIONS

The National Institutes of Health (NIH), Public Health Service, Department of Health and Human Services, invites nominations and applications for this Senior Executive Service (SES) position, with a current salary range of \$90,000 to \$112,000 per annum.

The Associate Director carries out the primary information mission of NIH through a comprehensive national public affairs program providing information to health care providers, researchers, and the public. The Associate Director will develop agency-wide plans for communications programs that display NIH-sponsored research results and their impact. The Associate Director will also develop and implement communications programs in support of appropriate elements of NIH's strategic plan. The Associate Director manages the Office of Communications and serves as the Freedom of Information Act Officer for NIH.

The complete Civil Service vacancy announcement which lists the managerial and technical qualifications required, the forms required for application to the SES position, and an Application for Federal Employment (SF-171) may be requested by letter or by telephoning (301) 496-2400.

Complete applications must be received no later than September 30, 1992, at the following address:

**National Institutes of Health  
Office of the Director  
Personnel Office  
ATTN: D. Kraut  
Building 31, Room 1C-27  
9000 Rockville Pike  
Bethesda, Maryland 20892**



All qualified candidates will receive consideration without regard to race, religion, color, sex, age, national origin, political affiliation, marital status, union membership, or any nondisqualifying handicapping condition.

NIH is an Equal Opportunity Employer

### DEAN Purdue School of Engineering and Technology Indiana University-Purdue University at Indianapolis

The Purdue School of Engineering and Technology on the Indiana University-Purdue University at Indianapolis Campus, is seeking applications and nominations for the position of Dean.

**Responsibilities:** The Dean provides innovative academic and administrative leadership. The School has an annual budget of \$10.8 mm; enrolls 2,300 majors; and has a full-time faculty of 70. This position affords an opportunity to shape a growing enterprise whose institutional character is rapidly developing. Of central importance will be fostering collaboration among engineering and technology faculty and faculties in the Schools of Medicine, Dentistry and Science to fully exploit opportunities for educational and research synergy.

**Qualifications:** Candidates must have qualifications and achievements consistent with a tenured appointment as full professor in the School, and a background that exhibits an outstanding record of leadership and achievement, and a demonstrated commitment to higher education.

Desirable qualifications include:

- an earned doctorate in engineering or closely related fields;
- an ability to lead and manage faculty, staff and students;
- a commitment to excellence in teaching, research and service;
- personal qualities that facilitate effective working relationships with the University, other disciplines and schools, alumni and business leaders;
- an understanding of the nature of and requirements for interdisciplinary research.

**The School:** The School of Engineering and Technology offers programs leading to Purdue University degrees at the baccalaureate and masters levels in departments of Electrical and Mechanical Engineering. Associate and baccalaureate degrees are awarded through departments of Computer Technology; Construction Technology; Electrical Engineering Technology; Manufacturing Technology; Restaurant, Hotel and Institutional Management; and Supervision. With an increased emphasis on research, especially in bio-medical technology and electronics, the combination of engineering and technology in one School affords special opportunities to anticipate new developments in both higher education and industry.

**Starting Date:** The position will be available on July 1, 1993.

**Applications and Nominations:** Applications received before November 1, 1992 will be given priority. Candidates should submit a letter of interest and a curriculum vitae or resume. Nominations and applications should be sent to:

**R. Thomas Lenz, Chair  
Search and Screen Committee  
Dean, School of Engineering and Technology  
Indiana University-Purdue University at Indianapolis  
801 W. Michigan Street, Room BS 3024C  
Indianapolis, Indiana 46202-5151**

IUPUI is an Equal Opportunity, Affirmative Action Employer. Candidates with a proven commitment to improving the participation of women and minorities in the engineering and technology professions are especially welcome.

## POSITIONS OPEN

Duke University **FACULTY POSITIONS IN PATHOLOGY.** We currently have several openings (which can be filled immediately) for faculty members (tenure-track) in our department. We are particularly interested in recruiting young scientists at the level of **ASSISTANT PROFESSOR** but are willing to consider appointments at other levels. These appointments will be for independent research positions, which will coordinate with a major departmental research initiative in atherosclerosis and vascular biology. We are particularly interested in recruiting individuals in the following areas:

A) Role of *leukocytes* in the development of atherosclerosis, particularly in regard to interactions with various altered lipids; B) Molecular and cell biology of *scavenger receptors*; C) Molecular and cell biology of *endocytic recycling receptors*, with particular interest in the receptor for alpha 2 macroglobulin as a member of the low density lipoprotein receptor family.

Individuals selected will join our faculty and bring or initiate independent research programs in these areas. Excellent working conditions and an attractive salary will be offered. Interested individuals should send curriculum vitae and the names of at least three references to: **Dolph O. Adams, M.D., Ph.D., Vice Chairman, Department of Pathology, Duke University Medical Center, Box 3712, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR OF NUTRITION.** A 10-month, tenure-track position is available in the Graduate Program in Nutrition at the University at Buffalo (UB). Ph.D. in nutrition or related field, preferably followed by postdoctoral research in nutrition-related field. Successful candidates are expected to develop a research program in nutrition that can attract extramural funding, advise students, teach graduate and undergraduate courses and participate on committees. Deadline is September 18, 1992 or until position is filled. Send curriculum vitae, transcripts, three references, and letter stating research interests and plans to: **Atif B. Awad, Ph.D., Director, Nutrition Program, SUNY/Buffalo, 301 Parker Hall, Buffalo, NY 14214.**

UB is an Affirmative Action/Equal Opportunity Employer.

### ECOLOGY/EVOLUTIONARY BIOLOGIST

The Department of Biology at the University of Rochester seeks to appoint a tenure-track **ASSISTANT PROFESSOR** in the area of Ecology/Evolutionary Biology. Preference will be given to individuals whose research focuses on plants, although all applications will be considered. Please send curriculum vitae, three letters of reference, and a statement of research and teaching interests to:

**Dr. John Jaenike  
Chairman, Search Committee  
Ecology/Evolutionary Biology  
Department of Biology  
University of Rochester  
Rochester, NY 14627-0211**

Closing date for receipt of completed applications is October 31, 1992. *The University of Rochester is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

The Department of Psychology, University of Colorado, Boulder, invites applications for a tenure-track **FACULTY POSITION** in the Behavioral Neurosciences to begin August 16, 1993. We seek an individual with specialization in neuroendocrine systems and their relation to behavior. Preference will be given to individuals working at the receptor, second messenger, or biochemical levels and who employ modern techniques in their research. The position is at the **ASSISTANT PROFESSOR** level, and applicants must have demonstrated ability for superior research and teaching. Salary is dependent on experience.

The University of Colorado at Boulder has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities and disabled individuals.

Applicants should send curriculum vitae, reprints, a statement of research and teaching interests, and three letters of recommendation to **Dr. Steven F. Maier, Department of Psychology, Campus Box 345, University of Colorado, Boulder, CO 80309.** The deadline for application is December 1, 1992.

## POSITIONS OPEN

### MICHIGAN STATE UNIVERSITY (MSU) PARASITOLOGY

The Department of Microbiology and the College of Veterinary Medicine at Michigan State University seek to fill a tenure-track faculty position at the level of **ASSISTANT PROFESSOR** in the area of animal parasitology. Candidates whose research involves modern molecular, biochemical, and/or immunological approaches are of particular interest. Responsibilities include teaching duties within the veterinary curriculum and developing an externally funded research program with national visibility. A Ph.D. is required. A D.V.M. or two or more years of postdoctoral experience is desirable. The Department of Microbiology at MSU is one of the largest and most diverse such departments in the nation with excellent undergraduate, graduate and professional school programs. To apply, send curriculum vitae with an outline of plans for future research and arrange for at least three letters of reference to be sent to: **Chairperson, Parasitology Search Committee, Department of Microbiology, 178 Giltner Hall, Michigan State University, East Lansing, MI 48824.** Review of applications will begin October 15, 1992. *Michigan State University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are particularly encouraged to apply.*

### FACULTY POSITION PROCARYOTIC MICROBIOLOGIST

Applications are invited for a tenure-track position in the Department of Microbiology, University of Pennsylvania School of Medicine to commence 1 July 1993. Candidates at the **ASSISTANT PROFESSOR** level are preferred, but others will be considered. Applicants should have an established research interest in procaryotic molecular genetics, development, or microbial pathogenesis. Candidates should have at least two years of postdoctoral experience and are expected to demonstrate the potential to develop a strong, independently funded research program. Teaching responsibilities include participation in a team-taught microbiology course for medical students and procaryotic molecular genetics for graduate students. Send curriculum vitae, names of at least three references, and a description of past research accomplishments and future plans to: **Dr. Daniel Portnoy, Search Committee, Department of Microbiology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6076.** *Application deadline 15 November 1992. An Equal Opportunity/Affirmative Action Employer.*

### DRUG ABUSE SCIENTIST

Applicants are sought for a tenurable faculty position in the Commonwealth of Virginia Center for Drug Abuse Research, Medical College of Virginia (MCV), Virginia Commonwealth University (VCU). Applicants must have sufficient teaching and scholarly experience to qualify for appointment at the rank of **ASSOCIATE PROFESSOR**. The applicant must have demonstrated research experience in i.v. drug self-administration and drug discrimination research with nonhuman primates and have active, transferable research grant support in these areas. The applicant should have teaching experience in psychopharmacology and an outstanding scientific reputation in the field of drug abuse as evidenced by service on national advisory committees and editorial boards. Apply to: **Dr. W. L. Dewey, Director, Commonwealth of Virginia Center for Drug Abuse Research, Box 568 MCV Station, Virginia Commonwealth University, Richmond, VA 23298-0568.** *VCU is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and those with disabilities to apply. Application deadline: October 15, 1992. Position description available.*

**REPRODUCTIVE ENDOCRINOLOGIST, PH.D.** Applications are invited for a basic science faculty position at the **ASSOCIATE PROFESSOR** level in the Division of Reproductive Endocrinology. A highly motivated Ph.D. with demonstrated expertise in reproductive endocrinology and molecular biology is required. The applicant should have an established record of independent research and extramural grant support. Salary is commensurate with qualifications and experience. Send letter of application designating current and long-term research interests, curriculum vitae, three recent publications and names of three references to: **Anthony G. Sacco, Ph.D., Wayne State University (WSU), Department Obstetrics/Gynecology, C.S. Mott Center, 275 East Hancock Avenue, Detroit, MI 48201.** *WSU is an Equal Opportunity/Affirmative Action Employer.*

## Immunologists

At Cytel, we are committed to scientific excellence. The diversity and exceptional quality of our scientific effort has resulted in important breakthroughs in immunology, glycobiology and adhesion molecules. We are seeking creative scientists with a superior record of accomplishment to help us achieve our goal: the development of human therapeutics to meet important health care needs. If you wish to contribute to the discovery and development of novel regulatory molecules through innovative concepts in rational drug design, please consider joining our research team in one of the following opportunities.

### ANTI-INFLAMMATION

You will conduct studies into the cellular and molecular mechanisms of chronic inflammation and devise a means for intervention. Candidates must have a Ph.D. or M.D., with postdoctoral experience in immunology and/or cell biology and demonstrated expertise in flow cytometry analysis. Experience in studies of leukocyte trafficking and cell adhesion molecules is preferred.

### ANTI-TUMOR/VIRAL THERAPY

You will conduct studies focused on the ex vivo expansion and characterization of antigen-specific cytolytic T lymphocytes for reinfusion into patients. Successful applicants must have a Ph.D. or M.D. or extensive relevant work experience. Specific experience in the ex vivo stimulation of lymphocytes or TIL cells, characterization of cells for reinfusion, and compliance with regulatory guidelines is essential.

Cytel provides a challenging research environment for dedicated scientists. In addition to competitive salaries we offer fully paid medical and dental benefits, full relocation assistance, stock options, and an employee stock purchase plan. Our research and development facility is located in San Diego's biotechnology center near La Jolla. To explore a career with Cytel, please send your curriculum vitae to **Dr. Howard Grey, Vice President, Research, Cytel Corporation, 3525 John Hopkins Court, San Diego, CA 92121.** We are an equal opportunity employer.

The logo for Cytel, featuring a stylized 'C' symbol followed by the word 'CYTEL' in a bold, sans-serif font.

## MACROMOLECULAR CRYSTALLOGRAPHER

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, is seeking a Protein Crystallographer to join its expanding program in structure-based drug design. The selected candidate will be expected to initiate a viable research program in the area of protein crystallography, and work on proteins of interest to SmithKline Beecham. These areas include proteins, receptors and enzymes of therapeutic interest.

Candidates must have a Ph.D. in a relevant discipline and a strong background in the practical aspects of Macromolecular Crystallography, including crystallization, data acquisition, structure solution and refinement, and molecular modeling. The responsibilities of this position emphasize collaborations with other SmithKline Beecham scientists and the ability to work as part of multidisciplinary teams.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. Our facility is equipped with area detectors, rotating anode generators, an extensive network of computers and modern graphic systems. We offer a competitive compensation, benefits and relocation package, as well as a stimulating environment in which to grow and excel. For confidential consideration, please send your C.V. and the names of three references to: **N. Hasson, Employment Administrator, #HO338, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939.** We are an Equal Opportunity Employer, M/F/H/V.

The logo for SmithKline Beecham, consisting of the letters 'SB' in a stylized, bold font.

**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.



# P O I N T O F V I E W.

## Postdoctoral Research with Impact.

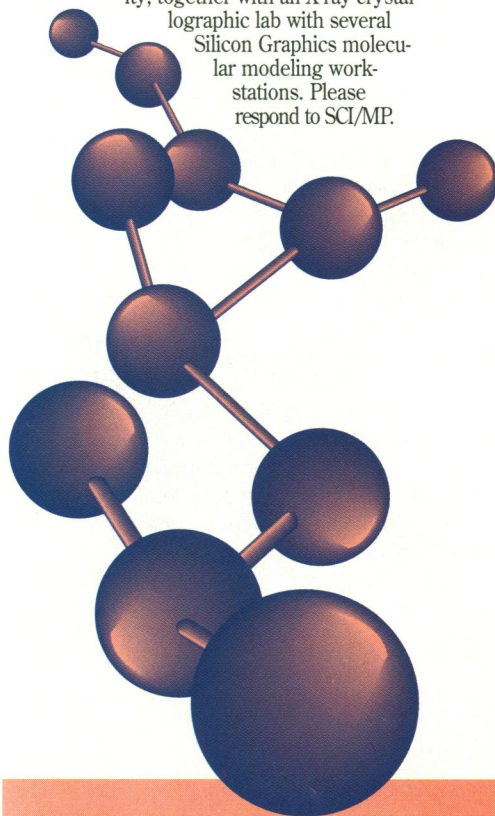
The resources of two powerful companies have joined together to create a totally new entity in pharmaceutical research. This fusion is generating a new and exciting level of energy and expertise within our teams of top-level R & D professionals. Consider this opportunity. Two years with us will help shape your career.

And while you're helping us, you'll be participating in a postdoctoral program with a novel training environment, opportunities for publication, and symposiums to share postdoctoral work. This is truly industry research at its best.

If you are a scientific professional who qualifies for any of the following two-year postdoctoral positions, please contact us.

### Growth Factor Receptor/Structural Biology

Individuals with skills in molecular biology, biophysical chemistry, medicinal chemistry, and molecular modeling are needed to strengthen ongoing efforts to characterize the interactions of growth factors with their respective receptors. Facilities exist for thermodynamic (titrating and scanning calorimetry) and spectroscopic characterization of protein/ligand interactions and protein folding/stability, together with an X-ray crystallographic lab with several Silicon Graphics molecular modeling workstations. Please respond to SCI/MP.



### Protease Inhibitors

Candidates should have a strong background in synthetic organic chemistry. In addition, applicants should have an interest in the evaluation of the interaction of small molecules with proteases and in therapeutic applications of protease inhibitors. Please respond to: SCI/CK.

### Inflammatory Diseases Research

Three postdoctoral positions are available for candidates with a PhD, MD or DVM and experience in inflammatory or immune-based models. Research experience should include aspects of tissue culture, immunology, histology, immuno-chemistry and molecular biology. The three positions are:

- *Intracellular Steroid Receptors*

A two-year postdoctoral program offers a challenging opportunity to investigate eucaryotic gene regulation with special emphasis on the role of steroid receptors and the interactions between transcription factors. The candidate should be familiar with the principles of gene regulation and possess demonstrable expertise in molecular biological techniques and DNA-protein assays. Experience with steroid receptors is highly desirable. Please respond to SCI/RR.

- *Macrophage Pathology*

Your interest in the role of macrophage pathology in inflammatory diseases is important. Expertise in tissue culture, blood cell isolation, cytokine and macrophage biology is preferred with additional preference to candidates with backgrounds in histology and immunocytochemistry. PhD required. The individual research project will be customized to the candidate's interests in combination with the group research objectives. Please respond to SCI/RN.

- *Immunosuppression/Immune-Based Tolerance*

The ideal candidate will have an interest in the role of the T Lymphocyte in immunosuppression and immune-based tolerance. Experience with models of immunosuppression and tolerance is desirable with a preference to candidates with expertise in T Lymphocyte activation and T cell anergy. The individual research project will be customized to the candidate's interests in combination with the research objectives of the group. Please respond to SCI/BJ.



### Radiopharmaceutical Research

This postdoctoral position is available for research of the mechanisms of radiopharmaceutical accumulation in solid tumors. This project will utilize radionuclide imaging technology as well as biochemical and cell culture procedures. The successful candidate will have a recent MD or PhD in Molecular Biology, Biochemistry or a related discipline. This position is based at the Radiopharmaceutical Research facilities of Du Pont Merck in Billerica, MA. Please respond to SCI/MT.

### HIV Research

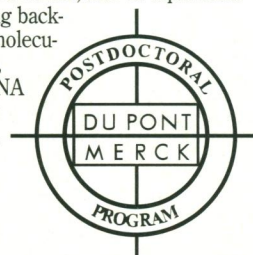
Two postdoctoral positions are available in the area of HIV Research:

- *Study of HIV infection of differentiated helper T cells.*

Research in this exciting area will encompass molecular analysis of virus infection, effects of novel antiviral compounds on virus replication and related aspects of virus: cell interaction. Research will be conducted in the context of a program focused on the discovery and development of novel anti-HIV therapeutics. The ideal candidate will have a PhD, MD or equivalent degree and will have a background in molecular biology including experience using PCR. The candidate should also have demonstrated ability and interest in cellular immunology and virology. Experience with cell separation technology and FACS analysis will be a plus. Please respond to SCI/HR.

- *Study of HIV genetic diversity as it applies to antiviral drug susceptibility.*

Research in this exciting and important area will involve isolation and characterization of infectious variants of HIV-1. The research will be focused on the discovery of novel anti-HIV drugs. The ideal candidate will have a PhD, MD or equivalent with a strong background in molecular virology, PCR and DNA sequencing techniques. Please respond to SCI/MO.



Merging Strengths...





## Postdoctoral Research with Impact.

### Regulation of Gene Expression-Translational Control

A postdoctoral position exists in our inflammatory diseases molecular biology group which will investigate the role of small molecules in controlling mRNA translation. A novel system of oxygenated sterol control of HMG-CoA reductase will be investigated. The successful candidate will have an MD, PhD or equivalent with expertise in some or all of the following: enzyme assays, protein purification, cloning, cell culture, *in vitro* transcription and translation, RNA extraction, Northern analysis, nuclear run-on assays, electrophoresis, antibody production, immunoprecipitation. Please respond to SCI/JT.

### Ribozyme Design & Development

This two-year postdoctoral position provides an opportunity to be involved in the cutting edge research of designing and developing ribozymes as molecular biology tools and potential therapeutic agents. Expertise in molecular biology techniques, especially those pertaining to RNA, are required. A PhD in Molecular Biology is preferred. Please respond to SCI/SH.

### HIV Protease Inhibitor Design and Synthesis

This postdoctoral position provides an opportunity for a good **synthetic organic chemist** to be involved in the exciting research of design and synthesis of novel HIV protease inhibitors. Emphasis will be on the application of new discoveries and principles in molecular recognition and protein structures. You will be joining a multidisciplinary team to discover a cure for AIDS via computer-aided drug design (CADD). Please respond to SCI/PL.

### Gene Transfer

A postdoctoral position is available for a highly motivated individual to join our study on gene transfer and regulation. Candidates should have a PhD or MD, strong background in molecular and cell biology, and some experience in protein isolation and characterization. The postdoctoral study will be focused on the development of new technologies and mechanistic studies; however, the specific project will be customized to the strength and interest of the candidate. Please respond to SCI/YEC.

For prompt, confidential consideration, please indicate position number and area of interest, and forward a CV, statement of research interests and career goals to: Administrator, Postdoctoral Program, **The Du Pont Merck Pharmaceutical Company**, Dept. SCI-80, P.O. Box 80328, Wilmington, DE 19880-0328. Du Pont Merck encourages the power and achievement of each individual in our diverse community of professional teams.

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Novo Nordisk



Novo Nordisk  
Biotech, Inc.

# Filamentous Fungal Scientists

*Novo Nordisk Biotech, Inc. has been established as a wholly owned R & D subsidiary of Novo Nordisk A/S, a major international Danish industrial biotechnology and pharmaceutical company. Novo Nordisk Biotech, Inc., located in Davis, CA, is focusing on the cloning, expression, mutagenesis and characterization of industrial enzymes. The Company has several positions open within each discipline noted below.*

## Fungal Physiology

### Scientists

Ph.D. in microbiology/genetics or related field with postdoctoral experience. (Job FP-S)

### Research Associates

B.S. and/or M.S. in microbiology/genetics or related field with at least two years' research experience. (Job FR-RA)

All fungal physiology candidates must have a strong knowledge of and extensive experience with methods relevant for studying physiology at a cellular level in filamentous fungi. The research will focus on the kinetics of protein synthesis and secretion as well as intra/extra cellular stability of specific recombinant proteins expressed in filamentous fungi. Research will also focus on the influence of macroscopic morphology of the mycelium on expression yield in lab scale fermenters. The aim is to develop improved expression systems, and exploit these systems by developing optimal fermentation processes. Candidates that have prior experience with laboratory scale fermentations will be preferred.

## Protein Chemistry/Enzymology

### Scientists

Ph.D. in biochemistry or related field with postdoctoral experience. (Job PC/E-S).

The candidates must have a strong knowledge of protein chemistry. Three positions are available in the following areas of expertise: 1) Protein Purification, 2) Protein Engineering and 3) Analytical Biochemistry. Candidates must have experience working with oxidoreductases and/or other enzymes.

## Fungal Molecular Biology

### Scientists

Ph.D. in molecular biology or related discipline with postdoctoral experience working with filamentous fungi. (Job FMB-S)

### Research Associates

B.S. and/or M.S. in molecular biology with at least two years' research experience. (Job FMB-RA)

All fungal molecular biology candidates must have extensive experience in construction and screening of genomic and cDNA libraries, PCR, nucleic acid hybridization, transformation, design of expression vectors and expression systems for filamentous fungi. Preference will be given to those individuals with knowledge of gene regulation and/or fungal physiology.

All positions require a proven record of innovative research involving their respective disciplines, as demonstrated by publications in peer reviewed journals. Candidates having evidenced strong intuition for selecting relevant directions for industrial research will be preferred. Novo Nordisk Biotech, Inc. offers competitive compensation and a comprehensive benefits program.

If you are innovative, well-organized, highly motivated and meet the above criteria, please send your curriculum vitae with a list of references for consideration, in confidence to: **Novo Nordisk Biotech, Inc., Department of Human Resources, 1445 Drew Avenue, Davis, CA 95616. Please indicate the position for which you are applying.** We are an equal opportunity employer.

Novo Nordisk A/S is a major international biotechnology company leading in the manufacture of insulin and the treatment of Diabetes. The company is the world's largest producer of industrial enzymes and also manufactures a number of other pharmaceutical and bioindustrial products such as antibiotics and pesticides. The company employs more than 10,000 people in 40 countries and has its headquarters in Denmark.



## POSITIONS OPEN

### FACULTY POSITIONS IN MOLECULAR PHYSIOLOGY University of North Carolina at Chapel Hill

The Department of Physiology at the University of North Carolina at Chapel Hill (UNC-CH) invites applications for two tenure-track faculty positions at the ASSISTANT PROFESSOR level from candidates with a Ph.D., M.D. or the equivalent degree and at least two years of postdoctoral experience. We seek individuals who will establish vigorous research programs investigating physiological processes at the molecular level and participate effectively in the department's graduate and medical student teaching programs. To complement existing strengths in the department, candidates studying the nervous, cardiovascular, or endocrine systems will be given special consideration, although outstanding applicants with research interests in other areas will also be considered. Send a complete curriculum vitae, a brief description of research interests and the names, addresses, and telephone numbers of three referees to: **Stanley C. Froehner, Chairman, Department of Physiology, University of North Carolina, Chapel Hill, NC 27599-7545.** UNC-CH is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply.

### ASSISTANT PROFESSOR RESEARCH TRACK

The Dental Research Center, University of North Carolina at Chapel Hill, seeks a biochemist for investigations on the extracellular matrix proteins in mineralized tissues. This will be a full-time, non-tenure-track faculty position with primary responsibilities in collagen biochemistry research in an established laboratory setting, with opportunity for development of complementary research interests. Additional duties include participation in an oral biology graduate program and postdoctoral training. The applicant must have an M.D., D.D.S., or Ph.D. in biochemistry or related area, minimum of two years of postdoctoral training and extensive experience with protein chemistry, molecular and cell biology. Evidence of a commitment to research and scholarship is desirable. Preference will be given to candidates who apply before October 15, 1992. Please send curriculum vitae, statement of research interests, and three letters of recommendation to: **Dr. Mitsuo Yamauchi, CB#7455, Dental Research Center, University of North Carolina, Chapel Hill, NC 27599-7455.** As an Equal Opportunity/Affirmative Action Employer, the University is committed to equality of education and employment opportunities and actively seeks to promote diversity by its recruitment. Women and minorities are encouraged to identify themselves.

**ASSOCIATE DIRECTOR FOR RESEARCH.** Sepulveda Veterans Administration Medical Center (VAMC) UCLA-affiliated GRECC seeking M.D. or Ph.D. basic scientist studying aging or age-related diseases. Applicants must qualify for Associate or Full Professor at UCLA. Can establish strong research program. Additional funded positions, space and resources available. *Sepulveda VAMC is an Equal Opportunity/Affirmative Action Employer. U.S. citizenship required.* Send curriculum vitae and inquiries to: **Ms. Adina Katz, Sepulveda VAMC GRECC (11E), 16111 Plummer Street, Sepulveda, CA 91343.**

### CHAIR, DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

The State University of New York Health Science Center at Syracuse invites applications and nominations for the position of Chair of the Department of Microbiology and Immunology. Candidates must have a Ph.D. or M.D. degree, or both, a distinguished record of research accomplishments, a commitment to teaching, and a desire to build and lead a department of prominence. The Department is undergoing extensive renovations of its research facilities and a number of vacant state-funded tenure-track lines are available to the new Chair. *Applications from women and minorities are encouraged.* Curriculum vitae of interested candidates and nominations should be sent to **Richard L. Cross, Ph.D., Department of Biochemistry and Molecular Biology, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210, Telephone: (315) 464-5127.** Review of curriculum vitae's will begin November 1, 1992 and continue until the position is filled.

*An Equal Employment Opportunity/Affirmative Action/ADA Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

Applications and nominations are invited for faculty positions at the ASSISTANT, ASSOCIATE OR FULL PROFESSOR level for September, 1993. We are seeking applicants who are using contemporary approaches to investigate problems in the general areas of cell signal transduction, growth control, and protein structure and design. Exceptional applicants in other areas will also be considered. Applicants at the Assistant Professor level should have a Ph.D., postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for the development of an independent research program. The Department has hired several new faculty in recent years and at present consists of 17 full time faculty and several joint appointees as well. The Department and College are well equipped and have research support facilities that include nucleic acid and protein synthesis and sequencing, NMR, EM, etc. Applications should include curriculum vitae, a summary of current and future research plans and the names of at least three individuals for references. Review of applications will begin after November 1, 1992 and will continue until the positions are filled. Send applications or nominations to: **Chair, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine, 1853 West Polk Street, Chicago, IL 60612.** The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

### DIRECTOR OF THE BARTLETT ARBORETUM University of Connecticut

The Department of Ecology and Evolutionary Biology at the University of Connecticut at Stamford invites applications for the Director of the Bartlett Arboretum. The Arboretum is part of the regional campus at Stamford, CT. This will be an anticipated tenure-track position with the rank of ASSOCIATE OR FULL PROFESSOR. A Ph.D. is required for this position. The Director will have primary academic ties to the Stamford regional campus, with the potential for interactions with faculty and students at the Storrs campus. We are searching for a terrestrial ecologist or conservation biologist who will initiate an active research program using Arboretum facilities. Research interests should emphasize plants, and may include such areas as: forest systems, urban environments, population and community ecology, or landscape-level perspectives. Candidates should be able to demonstrate success in securing extramural funding of research. Responsibilities associated with this 11 month academic position will emphasize management and administration of Arboretum facilities, research, and development of a public outreach program. Applicants should submit curriculum vitae, statement of research interests and goals, evidence of administrative experience, and three letters of reference to: **Dr. Charles Yarish, Head of Search Committee, University of Connecticut at Stamford, 641 Scofieldtown Road, Stamford, CT 06903.** Screening will begin October 1, 1992 and continue until the position is filled. *We encourage applications from minorities, women and people with disabilities.* (Search #3A28)

### CHAIRPERSON, INFECTIOUS DISEASE

Cook County Hospital, Chicago, IL is seeking a Chair, Infectious Disease. Under the Division Chair's leadership, the 8-member faculty is responsible for all adult clinical I.D. services (including a Retrovirology section) as well as postgraduate training responsibilities for Fellows and rotating residents. The Division Chair will be expected to fully develop a laboratory and clinical research program. The Fellowship program is integrated with Rush Medical College and qualified individuals will be eligible for a Faculty appointment at the Associate Professor or Professor level at Rush Medical College. Desired starting date is July 1, 1993. Candidates should submit curriculum vitae and names of three references to: **Gerald Burke, M.D., Chairman, Department of Medicine, Cook County Hospital, 1835 West Harrison, Chicago, IL 60612.** Cook County Hospital is an Equal Opportunity/Affirmative Action Employer M/F/D/V.

## POSITIONS OPEN

### PROFESSOR AND HEAD DEPARTMENT OF ENTOMOLOGY TEXAS A&M UNIVERSITY

Texas A&M University seeks a distinguished scientist-educator to head this diverse department of about 100 faculty and staff, 70 graduate, and 45 undergraduate students. The department's programs focus on both the basic and applied aspects of insect biology, systematics, molecular sciences and integrated pest management. The Head will provide intellectual and philosophical leadership necessary to maintain and strengthen the department's national and international preeminence in the entomological sciences, direct the educational programs, manage and coordinate departmental resources, and serve as the principal liaison between the department and external agencies. The Department Head holds an academic appointment as Professor in the College of Agriculture and Life Sciences and is responsible for the administration of statewide entomology programs of the Texas Agricultural Experiment Station and of the Texas Agricultural Extension Service. Qualifications include a Ph.D. with an emphasis in entomology; an academic record of distinction in teaching, research and/or extension in a university environment; and capability for leadership, management, and integration of academic, research, and extension programs. Nominations, or applications with current curriculum vitae and names and addresses of at least three references, should be sent by September 30, 1992 to: **Dr. Max D. Summers, Chair, Search Committee, Department of Entomology, Texas A&M University, College Station, TX 77843.**

*The Texas A&M University System is an Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR

**FEINSTEIN WORLD HUNGER PROGRAM.** Brown University seeks individual with distinguished background in research, commitment to interdisciplinary work and international experience and recognition. Candidates holding Ph.D. or M.D. or equivalent in health, natural or social sciences will be considered for appropriate faculty appointment. Review of applications begins October 15, 1992. Write or fax for information packet (no phone calls) to: **Joy Csanadi, World Hunger Program, Brown University, Box 1831, Providence, RI 02912. FAX: 401-863-2192.** An Equal Opportunity/Affirmative Action Employer.

### UNIVERSITY OF St. Thomas FACULTY POSITION BIOCHEMISTRY

The Departments of Chemistry and Biology of the University of St. Thomas jointly invite applications for a full-time tenure-track position in biochemistry. The rank of the position is open and salary will be commensurate with the successful candidate's experience. The position begins on September 1, 1993. Teaching responsibilities will include courses and labs in biochemistry, labs in organic chemistry and, if needed, involvement at some point in the general chemistry program. The successful candidate must demonstrate a strong background in organic chemistry, sufficient for teaching the organic lecture should the occasion demand it in the future. The development and implementation of a biochemistry lab course as well as the establishment of a vigorous research program involving undergraduate students are expected. Postdoctoral research experience will be considered advantageous to the establishment of a research program. A Ph.D. in biochemistry, or a closely related discipline, is required as well as a strong commitment to teaching at the undergraduate level in a liberal arts context. St. Thomas is a co-educational, Catholic liberal arts college committed to the total development of the individual student. Send letter of application, curriculum vitae, brief statements of teaching philosophy and research plans, graduate and undergraduate transcripts, and arrange to have three letters of reference sent directly to: **Ms. Carol Felton, Office Coordinator, Mail #4050, University of St. Thomas, 2115 Summit Avenue, St. Paul, MN 55105-1096.** All materials, including letters of reference, must be received by October 20, 1992. Late/incomplete applications will not be considered. *The University of St. Thomas is an Equal Opportunity/Affirmative Action Employer.*

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*Applications accepted on a continuous basis throughout the year. Those postmarked by January 15 will be reviewed in February; by April 15, in June; and by August 15, in October.*

For application materials and information on participating laboratories contact:  
Associateship Programs GR 430/S4



**NATIONAL  
RESEARCH COUNCIL**  
2101 Constitution Avenue, NW  
Washington, DC 20418  
FAX: (202) 334-2759

**SENIOR VICE PRESIDENT—ACADEMIC AFFAIRS  
UNIVERSITY OF CALIFORNIA**

President-designate J. W. Peltason and The Regents of the University of California invite nominations and applications for the position of Senior Vice President—Academic Affairs of the University of California. This position is being re-advertised following the appointment of President-designate Peltason.

The University of California is a publicly assisted institution with nine campuses which include five academic medical centers and 14 health sciences schools, a Division of Agriculture and Natural Resources, numerous organized research units and programs abroad. The University is the state's land grant university. It also manages three national laboratories for the U.S. Department of Energy. In 1991-92, the University enrolled 165,040 students and employed about 156,000 persons including those at the three DOE national laboratories. Its annual budget for 1991-92 was approximately \$9.5 billion, inclusive of the DOE laboratories.

The Senior Vice-President—Academic Affairs reports directly to the President of the University, is one of two Senior Vice Presidents, and is designated to act first for the President in his absence. Responsibilities include development of academic and research policy; administrative oversight for University planning and associated budget matters; serving as Chair of the Executive Planning and Budget Committee; liaison with University wide Academic Senate and student governments; liaison to the California Postsecondary Education Commission; development of policy in such areas as admissions and outreach, library planning, student affirmative action, and student affairs. The Senior Vice President also is responsible for programmatic oversight of the three Department of Energy laboratories managed by the University, and for University Extension, summer sessions, and the University Press.

Candidates should have senior administrative experience in large scale, substantial, diverse, and complex organizations, preferably research universities, together with a strong record of teaching, research, and scholarship.

Applications and nominations accompanied by current resumes may be addressed to:

The President  
University of California  
300 Lakeside Drive  
22nd Floor  
Oakland, California 94612-3550

and should be received no later than October 7, 1992, to be assured full consideration.

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**HUBBLE  
POSTDOCTORAL  
FELLOWSHIPS**

The Space Telescope Science Institute announces the continuation of the Hubble Fellowship Program in cooperation with astronomical institutions throughout the United States. The main objective of the Program is to provide recent postdoctoral scientists of unusual promise and ability opportunities for research on problems, largely of their own choosing, that are related to the Hubble Space Telescope science and compatible with the interests of the host institutions. The program is open to scientists of any nationality who have earned their doctorates after January 1, 1990, in astronomy, physics, or related disciplines.

The duration of the fellowship is for a total of three years, which includes an initial appointment of two years and an extension to a third year, contingent on a positive mid-term review. Contingent on funding from NASA, up to 15 new Hubble Fellows will be supported this year by grants to United States institutions.

The Announcement of Opportunity, including the application instruction, may be obtained from the address listed below. The application deadline is November 20, 1992. The new Hubble Fellow appointments are expected to begin on September 1, 1993. Minorities and women are strongly encouraged to apply. EEO/AA/M/F/D/V.

**Hubble Postdoctoral Fellowships**  
**SPACE TELESCOPE SCIENCE INSTITUTE**  
3700 San Martin Drive • Baltimore, MD 21218  
SPAN:6559::HFELLOWS  
BITNET: HFELLOWS@STSCI.BITNET  
INTERNET: HFELLOWS@STSCI.EDU  
Attention: Hubble Fellowship Program Office



**Protein Chemist**

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has an exceptional opportunity for a protein chemist to support new drug discovery programs in molecular biology, biochemistry and biotechnology at our Ann Arbor, Michigan research center.

The successful candidate will collaborate with researchers in molecular biology, biochemistry, biotechnology and analytical chemistry to characterize the structure of biologically active peptides and proteins. This person will play a key role as a member of our structure facility interfacing with biomolecular research programs. Responsibilities include purifying and preparing proteins for structural elucidation, protein sequencing, peptide mapping, capillary and gel electrophoresis, microbore and capillary HPLC, chemical modifications, electroblotting, and amino acid analysis. Other technology utilized in the structure facility are mass spectrometry (e.g., electrospray, laser desorption, LC/MS) and NMR spectroscopy (e.g., isotope editing, multidimensional).

Requirements for this position include a Ph.D. in Biochemistry or Protein Chemistry with 3-5 years of experience beyond degree (or equivalent experience) in protein chemistry. A broad experience in the characterization of proteins is required. Prior experience in a core facility is desirable.

Interested persons should submit their resume with references to **Box JDM-GM, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"**



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## POSITIONS OPEN

**HARVARD MEDICAL SCHOOL FACULTY POSITION**—Available to study the molecular biology of epithelial calcium transport. Applicants should have a Ph.D. and/or M.D. degree, extensive postdoctoral training in biochemistry and molecular biology, and a strong commitment to both research and teaching. The successful candidate will join a large effort devoted to physiology, biochemistry and molecular biology of epithelial ion transport. Curriculum vitae to: **B.M. Brenner, MD, Director, Renal Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** *Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION MOLECULAR APPROACHES TO BIOLOGICAL TIMING

Tenure track position in the School of Medicine in association with the NSF Center for Biological Timing. The Center offers newly renovated laboratory space. We seek individuals with research interests in the molecular mechanisms for the generation and control of neuroendocrine rhythms. Interested candidates should send curriculum vitae, statement of research interests and three letters of reference by October 15, 1992 to: **Dr. Margaret Shupnik, Chair, Search Committee, NSF Center for Biological Timing, Gilmer Hall, University of Virginia, Charlottesville, VA 22901.**

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

### PLANT MOLECULAR BIOLOGY OPEN RANK

The Department of Biology at the University of Michigan invites applications for a Plant Molecular Biology position. Although we anticipate hiring at the level of tenure-track Assistant Professor, candidates at all levels will be considered. We seek individuals who employ the techniques of molecular biology in attacking significant problems in plant biology. Any subject in plant biology is appropriate. The most important consideration will be the quality and potential of the candidate's work. The Department has recently completed a \$13 million building renovation, and the new faculty member will be housed in a modern laboratory. In addition, the Matthaei Botanical Gardens, a unit of the Department, provides facilities for the growth of experimental material. The Department has facilities for DNA synthesis and molecular graphics; peptide synthesis and DNA and protein sequencing facilities are available nearby. The successful candidate will be expected to conduct an active research program and participate in the graduate and undergraduate teaching programs of the Department. Application materials should include current curriculum vitae, a statement of research plans, and applicants should request that letters of recommendation from at least three referees be sent directly to the Department of Biology at the University of Michigan. Application materials should be addressed to:

**Dr. Eran Pichersky**  
Chair, Plant Molecular Biology Search Committee  
Department of Biology  
The University of Michigan  
Ann Arbor, MI 48109-1048

Deadline for applications is October 15, 1992.

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

**INSTRUCTOR IN COMPARATIVE PATHOLOGY.** Conduct collaborative and independent research on reproductive biology of nonhuman primates relevant to conservation of nonhuman primates and reproductive biology of human beings. Specifically: develop *in vitro* culture methods for the isolation and maturation of large numbers of fertilizable rhesus monkey oocytes from pre-antral follicles; initiate programs in artificial insemination; development of a sperm bank; study the role of fetal adrenal hormones to parturition; and develop methods to predict ovulation in rhesus monkeys.

Candidates seeking consideration should have the following qualifications: D.V.M. or Ph.D. in the specialized field of animal reproductive physiology; and at least four years pre- or post-doctoral experience in the field of reproductive biology. Must have expertise in performing the techniques listed above. Salary \$35,000 per annum.

Send résumés to:

Case #21022  
P.O. Box #8968  
Boston, MA 02114

## POSITIONS OPEN

### FACULTY POSITIONS Department of Biochemistry, Molecular BIOLOGY AND CELL BIOLOGY NORTHWESTERN UNIVERSITY

The Department of Biochemistry, Molecular Biology and Cell Biology seeks outstanding candidates for full-time faculty appointments (rank open). The search will focus on cellular and developmental biology, and structural biology. Candidates should submit curriculum vitae, a list of publications, a statement of future research objectives and letters of reference from three persons knowledgeable of the candidate's research and teaching abilities to: **Chairman, Faculty Search Committee, Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, IL 60208-3500.** To ensure full consideration, applications should be received by November 15, 1992.

*Women and members of minority groups are urged to apply. Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.*

### FACULTY POSITION

**MOLECULAR BIOLOGY AND NUTRITION SCIENCE.** The Institute of Biosciences and Technology, Texas A&M University, located in the Texas Medical Center, Houston, Texas, invites applications for a tenure-track faculty appointment (level open). The applicant must have a record of accomplishments in cell or molecular biology with relevance to the field of nutritional sciences, and an interest in clinical and/or animal model studies in nutrition. Applicants should have a Ph.D. or M.D. Applicants should submit a letter outlining their research experience and future interests related to nutritional sciences; curriculum vitae; three recent reprints of their scientific publications; and names of three individuals who may be contacted to provide letters of reference to: **Dr. Charles J. Arntzen, Institute of Biosciences and Technology, 2121 Holcombe Boulevard, Suite 703, Houston, TX 77030-3303.** A review of applications will begin on October 1, 1992. *The Texas A&M University System is an Affirmative Action/Equal Opportunity Employer.*

**Duke University: FACULTY POSITION IN CELL AND LEUKOCYTE BIOLOGY.** We have an opening for a junior faculty member (non-tenure-track) to join our research group. The laboratory, comprising four faculty members with diverse backgrounds in cell biology, molecular biology, biochemistry, immunology, and leukocyte biology, investigates the functions of macrophages and how these are regulated. Interactions between second messengers and gene regulation are emphasized. We seek a highly qualified scientist with interests and skills in second messengers. A background in either cyclic nucleotides, kinases, or ion fluxes would be highly desirable but not necessary. The position offers the opportunity for the successful candidate to join a well established laboratory, develop and supervise a productive ongoing research program, and develop independent research initiatives. An attractive working environment and salary are offered. Interested individuals should send curriculum vitae and the names of at least three references to: **Dolph O. Adams, M.D., Ph.D., Director, Laboratory of Cell and Molecular Biology of Leukocytes, Box 3712, Duke University Medical Center, Durham, NC 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH POSITION** available immediately to study the use of peptides whose structures are deduced from peptide libraries as ligands for the affinity chromatography of proteins to be used as biopharmaceuticals. This is a joint university/industry research project to characterize and optimize the adsorption and elution of proteins on affinity chromatographic packings and to develop a pilot scale separation process. Doctoral degree in biochemistry, chemistry, biotechnology or biochemical engineering with prior experience in affinity chromatography of proteins is essential. Salary \$28,000 per year, available for 14 months with possible renewal. Send curriculum vitae and three letters of recommendation to: **Professor Ruben G. Carbonell, Department of Chemical Engineering, North Carolina State University, P.O. Box 7905, Raleigh, NC 27695-7905.** *NCSU is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

The Division of Biology, California Institute of Technology, seeks **TWO FACULTY MEMBERS** in the areas of Cell Biology and Immunology. Appointments will be for tenure track positions. Successful applicants are expected to generate creative and productive research programs. Candidates should forward their curriculum vitae, list of publications, a brief statement of research interests and plans, and arrange for letters of recommendation from three referees to be sent to: **Ms. Joyce Kato, Immunology and Cell Biology Search Committee, Division of Biology 147-75, California Institute of Technology, Pasadena, CA 91125.** *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.*

### DEVELOPMENTAL BIOLOGY THOMAS JEFFERSON UNIVERSITY

Tenure-track faculty position in the Department of Anatomy and Developmental Biology. Thomas Jefferson University, an academic health center, has rapidly expanding programs in cellular and molecular biology. Applications are invited from candidates having postdoctoral training and demonstrated excellence and productivity in a research area of normal or abnormal animal development. There must be clear evidence of potential to establish an independent, externally funded research program utilizing molecular, genetic or embryological methods. Primary teaching responsibilities will be in Medical Histology and graduate programs. To apply send cover letter, curriculum vitae, concise statement of research objectives and teaching interests, plus three letters of recommendation to: **Dr. Thomas B. Knudsen, Department of Anatomy, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107.** *We are committed to a smoke-free environment. Thomas Jefferson University is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY.** Position available immediately to study the mechanisms of regulation collagen and extracellular matrix gene expression in experimental cardiac hypertrophy and fibrosis. Candidates with experience in molecular biology should submit curriculum vitae and names of references to: **Dr. R. I. Bashey, Rheumatology Research, 508 Bluemle Life Sciences Building, Thomas Jefferson University, 233 South 10th Street, Philadelphia, PA 19107-5541.**

**NEUROBIOLOGY POSTDOCTORAL POSITION.** Molecular and cellular/histochemical approaches may be used to study neurotransmitter plasticity in the rodent and primate brain. Ongoing studies address (1) identification of cellular factors that regulate neuropeptide gene expression during development and in adults, and (2) the role of neurotransmitter and hormone receptors in the control of mammalian neuronal development. Please send curriculum vitae, a description of research interests and the names of three references to: **Richard Simerly, Oregon Regional Primate Research Center, 505 N.W. 185th Ave., Beaverton, OR 97006.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION.** Appointment in Anesthesiology. Participate in evaluation of existing and new technology using electrical stimulation to relieve the pain. Involves interaction with patients and physicians, development of computer data bases, preparation of written reports and participation in physician training programs. Above average skills in the use of English for verbal and written communication required. Contact: **James E. Heavner, Anesthesiology, TTUHSC, Lubbock, Texas 79430, Fax # (806) 743-2984.** *TTUHSC is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION IN CANCER GENETICS.** The University of Michigan. Position available mapping and identifying genes altered in human solid tumors. Project will involve state of the art technology for genomic analysis. Opportunity for interaction with numerous investigators in the Human Genome Center and Cancer Center. Applicants should have Ph.D. degree and familiarity with molecular genetic techniques. Contact: **Dr. Paul Meltzer, Division of Cancer Biology, Department of Radiation Oncology, The University of Michigan, C560 MSRBII, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0668.** Telephone: (313) 764-4539. FAX: (313) 764-4534. *An Equal Opportunity/Affirmative Action Employer.*

# Bioorganic Chemistry

Genentech, Inc., an internationally recognized leader in the field of biotechnology, is seeking Chemists to make innovative scientific contributions to drug discovery research. Working with Scientists from various departments, you will help pioneer research in the design and synthesis of small molecules for the development of new pharmaceuticals. Our facilities include state-of-the-art analytical instrumentation, a complete chemistry and life sciences library, and new laboratories at our South San Francisco, California headquarters. Join our growing Bioorganic Chemistry group in one of the following opportunities:

## Scientists

### Synthetic Organic/Medicinal Chemistry

You will be responsible for design, synthesis, purification and isolation of novel organic compounds, including natural products and their semisynthetic derivatives, for pharmacological evaluation. The successful candidates will have a PhD in synthetic organic chemistry and experience in organic synthesis or natural products chemistry, or equivalent. A strong desire to make substantial contributions in breakthrough areas of drug research and the ability to interact effectively with our multidisciplinary team of Scientists is essential.

## Postdoctoral Researcher

You will use your strong synthetic background to develop strategies for exploring the structural basis of peptide/protein interactions. Interacting closely with colleagues in molecular modeling, protein engineering, and medicinal chemistry, you will undertake the challenge of structure-based design.

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Within our Synthetic Organic group, you will perform spectroscopic and chromatographic techniques. A BS/MS in Chemistry and synthetic organic or peptide synthesis experience are required. Ability to work independently and communicate effectively is essential.

Our progressive company offers an excellent salary and benefits package which includes child care facilities, free health club membership and fully paid medical/dental/vision coverage. For immediate consideration, please send your resume to Genentech, Inc., Human Resources, Dept. YMMV, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.

# Genentech, Inc.

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### STEM CELL BIOLOGY

Amgen has distinguished itself as the industry leader in the development of human therapeutic products through applications of biotechnology. As a result of our continuing commitment to the discovery and characterization of novel hematopoietic growth factors, we are actively seeking Research Scientists to contribute to the development of this program.

Candidates for the Research Scientist positions must have a Ph.D. in cell/molecular biology or biochemistry, preferably with an emphasis on hematopoietic cell growth and differentiation, and two to four years post-doctoral experience. Responsibilities for this position will include development of new research programs, in particular, the identification and characterization of new hematopoietic growth factors, stem cell and megakaryocyte biology and receptor biology, as well as complementing on-going projects.

**Amgen provides a stimulating and challenging research environment** in which individuals are given the resources necessary to achieve their goals. Our compensation and benefits package reflects our commitment to attracting the best scientific talent available. If you have the necessary skills and would like to be a part of an organization that places a high priority on its human resources, please send a complete CV, in confidence, to: **Amgen, Inc., Staffing Department (Mail Code 10-1-A-411), Job Code #S-402, Amgen Center, Thousand Oaks, CA 91320-1789.** Amgen is an equal opportunity employer.

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## Scientist

### Biological Assay Development

You will develop and validate biological assays needed for the development of therapeutic products. A Ph.D. with 0-2 years experience or a B.S./M.S. with equivalent experience in biology, immunology or related field are required. Experience in cell culture and assay development is essential. Experience in receptor binding assays, cell proliferation/mitogenic assays, cytotoxic assays, antibody neutralization assays and virus neutralization assays is preferred. (Box #92-336)

## Scientist

### DNA Assay Development

You will develop and validate assays for nucleic acid and other assays to support the development of therapeutic products. Responsibilities include methods development, development of necessary reagents, and writing protocols and reports. A Ph.D. in Biochemistry or Molecular Biology with 0-3 years experience or an M.S. with equivalent experience are required. Experience in Molecular Biology as it pertains to the development of assays for nucleic acids in bio-therapeutics and good communications skills are also required. Experience with GMP requirements, immuno assays, and assay validation a plus. (Box #92-337)

If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume indicating appropriate Box#, to: Chiron Corporation, Human Resources, 4560 Horton Street, Emeryville, CA 94608-2916, FAX (510) 601-2504. We are an equal opportunity employer.



# CHIRON



## POSITIONS OPEN

### POSTDOCTORAL AND GRADUATE OPPORTUNITIES IN ANIMAL BEHAVIOR AT INDIANA

The NSF-supported Center for the Integrative Study of Animal Behavior at Indiana University seeks outstanding candidates for training that combines mechanistic and evolutionary approaches to the study of behavior. Focus areas include mate choice, sexual behavior, ecology of learning, neural plasticity, communication, orientation and migration, parental behavior, and development. Postdoctoral candidates (who must be eligible to work in the US) should send curriculum vitae, 4 to 5 page research proposal, and three letters of recommendation by November 15, 1992 to guarantee consideration for positions available January 1, 1993. Predoctoral candidates should request applications from the Psychology or Biology Departments to be returned February 1 for the fall of 1993. Reply to: CISAB, 402 North Park, Indiana University, Bloomington, IN 47405. FAX: (812) 855-0411. Applications by minorities and women are strongly encouraged.

**THE AMERICAN UNIVERSITY.** The Biopsychology Laboratory, in the College of Arts & Sciences, is seeking candidates for a **POSTDOCTORAL POSITION** in biopsychology. Candidates should have postgraduate degree in organic chemistry and expertise in analytical chemistry including use of mass spectrophotometry GC and with animal behavior research. Investigation involves examination of olfactory toxins on axonal transport and odor detection in animals. Salary is \$17,000 per year. Address inquiries to: The American University, BIOPSYCHOLOGY LABORATORY, room 321 Asbury, Washington, D.C. 20016. *An Affirmative Action/Equal Opportunity Employer University.*

### POSTDOCTORAL WORK IN BIOPHYSICS

Is the rate of cellular metabolism controlled and changed through mitochondrial calcium? We are investigating this using fluorescence microscopy including digital imaging, fluorescence spectroscopy and patch clamping. To apply send curriculum vitae and names of three references to: **Dr. Thomas Gunter or Dr. Shey-Shing Sheu; Biophysics; University of Rochester; Rochester, NY 14642.** *The University of Rochester is an Affirmative Action, Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available to study cell growth regulation and signal transduction for candidate with background in molecular biology. Please send curriculum vitae and three letters of recommendation to: **Dr. Sarah Spiegel, Department of Biochemistry and Molecular Biology, Georgetown University Medical Center, 307 Basic Science Building, 3900 Reservoir Road, NW, Washington, DC 20007.** *Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL OR STAFF ASSOCIATE POSITION Columbia University

To study molecular and cellular factors which modulate lipoprotein metabolism and atherosclerosis. Previous experience in molecular, biological, and biochemical techniques required. Please send curriculum vitae to: **Irene Franck, Administrator, Division of Preventive Medicine and Nutrition, 630 West 168th Street, P&S 9-510, Columbia University, New York, NY 10032.** *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

Two positions are available for Ph.D., M.D., or M.D./Ph.D.'s to study the molecular biology and genetics of: 1) G-protein signaling using gene targeting in cell lines and 2) the regulation of blood pressure using transgenic animals. *Candidate must be U.S. citizen or permanent resident.* Supplementation of NIH stipend depending on experience. Send letter stating interest, curriculum vitae, and names of three references to: **Richard M. Mortensen, M.D., Ph.D., Endocrine-Hypertension Division, Brigham and Women's Hospital, Harvard Medical School, 221 Longwood Avenue, Boston, MA 02115.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately for Ph.D. and/or M.D. to study the expression of extracellular matrix genes in an *in vitro* model of pulmonary fibrosis. Experience with recombinant DNA technology and cell culture desirable. Please send (or FAX) curriculum vitae and letters and telephone numbers of three references to: **Dr. Jeanne C. Myers, Department of Biochemistry and Biophysics, University of Pennsylvania, 342 Anatomy Chemistry, Philadelphia, PA 19104-6059.** FAX, 215-898-4217. *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS.** Two, possibly three, positions available. Two of these positions involve enzyme mechanisms and enzyme structure-function and require experience in protein isolation and characterization and/or recombinant DNA techniques. The third potential position involves nucleotide analog synthesis and enzymology and requires experience in organic synthesis. Send curriculum vitae, statement of research interests and experience, and three letters of reference to: **Dr. C.A. Caperelli, Division of Pharmacology and Medicinal Chemistry, College of Pharmacy, University of Cincinnati Medical Center, Cincinnati, OH 45267-0004.**

### POSTDOCTORAL POSITION

A postdoctoral position to study the molecular pathogenesis of *E. coli* urinary tract infections is available immediately. Experience in tissue culture and molecular biological techniques required. Send curriculum vitae and the names of three references to **Dr. Michael Donnenberg, Division of Infectious Diseases, University of Maryland School of Medicine, 10 South Pine St., Baltimore, MD 21201.** *Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION

Available immediately to study developmental function and unorthodox secretion of a vertebrate laminin-binding lectin. Projects involve molecular genetic manipulation of protein expression in cultured cell lines, protein purification, and immunohistochemistry. Send curriculum vitae, brief research summary, and three letters of reference to: **Douglas N.W. Cooper, Ph.D., LPPI Box F, University of California, San Francisco, 401 Parnassus Avenue, San Francisco, CA 94143-0984.**

**POSTDOCTORAL POSITION** available immediately to study secretory trafficking of proteins and lipids in malarial parasites. Individuals should have a Ph.D. and a strong background in protein or lipid biochemistry and/or molecular biology. Send a statement of research interests, curriculum vitae, names and addresses of three references to: **Dr. Kasturi Haldar, Department of Microbiology and Immunology, Stanford University, Stanford, CA 94305.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** (Research Associate) available for molecular biological studies on the structure, function and regulation of adenosine receptors. Ph.D. in appropriate basic science required. Experience with cell signalling systems useful and molecular biology background required. Send curriculum vitae and names of three references to: **Gary L. Stiles, M.D., Department of Medicine/Pharmacology, Box 3681, Duke University Medical Center, Durham, NC 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

The Alaska Department of Fish and Game, Division of Oil Spill Impact Assessment and Restoration, is recruiting for a fully exempt Wildlife/Habitat **PROGRAM MANAGER** in Anchorage. This position provides technical direction and review; budgetary, planning, and other programmatic support; and interagency coordination for the division's wildlife and habitat program. Minimum qualifications: Ph.D. in wildlife/environmental science or related field and two years as leader of a large research or management project; or similarly a Masters degree and four years experience. Starting salary is \$46,620 per year. Please contact: **Stephanie Randall, Administrative Services, Juneau, for application and further information. Telephone: (907) 465-4141.**

## POSITIONS OPEN

### GRADUATE RESEARCH FELLOWSHIPS TEXAS TECH UNIVERSITY

Graduate research fellowships are available to support superior Ph.D. candidates interested in biochemistry, cell biology, molecular biology, microbiology, physiology and genetics through the Institute for Biotechnology. Faculty research interests include regulation of cell wall synthesis, plant responses to environmental stresses, regulation of gene expression, molecular markers and genome mapping, evolutionary genetics, cytogenetics, microbial genetics, mechanisms of photosynthesis, and structure-function relationship in proteins. Excellent field, greenhouse, growth chamber, and laboratory facilities are available for various aspects of biochemical, cellular, and molecular investigations. A modern protein and DNA instrumentation core facility funded by NSF, an electron microscopy laboratory, and antibody production facilities are available to support the research programs. The fellowship stipend will be \$15,000 for the academic year from September 1, 1993 to August 31, 1994. Interested students should submit statement of research interests, résumé, transcripts, GRE and TOEFL scores. Complete applications must be received no later than March 1, 1993. Submit all materials and three reference letters to: **Dr. Henry T. Nguyen, Director, Institute for Biotechnology, Mail Stop 2122, Texas Tech University, Lubbock, TX 79409.** Telephone: (806) 742-1622. FAX: (806) 742-2836.

## THE STATE UNIVERSITY OF NEW JERSEY RUTGERS

### FACULTY POSITION DEVELOPMENTAL GENETICIST

Applications are invited for a tenure-track faculty position at the Waksman Institute with a joint appointment in an appropriate academic department. The Waksman Institute has been at the center of a major initiative to transform Rutgers University and the adjoining University of Medicine and Dentistry of New Jersey into a major, world class research center. Nearly 100 new faculty members in the biomedical area alone have been recruited during the past seven years. The Waksman Institute has added 11 members during this period with emphasis on four areas: molecular developmental genetics, microbial genetics, plant molecular genetics, and structural biology. Candidates are sought to further expand the developmental genetics group. The successful applicant will be expected to conduct a vigorous independent research program and to participate in instructional activities. Recently renovated laboratory space and generous start-up funds are available.

Candidates should send a biographical sketch (with a list of publications and a description of research interests) and request that three letters of reference be sent to: **Dr. Joachim Messing, Director, The Waksman Institute, Rutgers, The State University of New Jersey, P.O. Box 759, Piscataway, N.J. 08855-0759.**

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## UNIVERSITY COLLEGE LONDON

### ALEXANDER WILLIAMSON CHAIR OF CHEMISTRY

Applications are invited for the newly established Alexander Williamson Chair of Chemistry tenable in the Chemistry Department from 1 October 1993.

Applicants will be expected to have an international reputation in synthetic organic chemistry and be able to make a leading contribution to the research effort in this area. There are considerable possibilities for collaborative research since the Department has an international reputation in inorganic, medicinal, organic and physical chemistry and the College has many outstanding research groups in biomedical research. Also on site are the Sandoz Institute of Medical Research and the Eisai Research Institute.

Informal enquiries may be addressed to Professor R. J. H. Clark FRS, Head, Department of Chemistry, Tel: 071-387-7050, Ext. 4620, Fax 071-380-7463 or to Professor C. R. Ganelin FRS, Ext 4624, from each of whom further details are available.

Applications, ten copies, or one if from overseas, including a full curriculum vitae and the names and addresses of three referees should be sent to the Provost, University College London, Gower Street, London, WC1E 6BT. The closing date for applications is 15 October 1992. Equal Opportunities Employer.

## POSTDOCTORAL POSITIONS Biotechnology and Microbiology

Wyeth-Ayerst Laboratories is a Division of Fortune 100 American Home Products Corporation, a leading manufacturer and marketer of health care products with multi-billion dollar annual sales and an impressive record of growth and profitability. We currently have two Postdoctoral opportunities (one-year assignments) available in the Biotechnology and Microbiology division at our Radnor, PA Research facility.

These positions offer the opportunity to become part of a professional research team. Candidates selected will have the opportunity to choose a project suitable to their background and interest. One position is on a team studying the molecular and immunological basis of human papillomavirus tumor induction and tumor regression, using *in vivo* and *in vitro* models. Candidates should be Ph.D.'s with solid background in molecular virology and immunology. The second position available is to study mammalian and E. coli gene expression, vector construction and antisense RNA expression using recombinant adenovirus. Position requires a Ph.D. with experience in molecular biology, e.g. mammalian and E. coli cell expression and tissue culture.

Wyeth-Ayerst offers a competitive salary and comprehensive company benefits. Qualified candidates are invited to submit a curriculum vitae to: **Recruitment Manager, Wyeth-Ayerst Research, Job #006-S, P.O. Box 8299, Philadelphia, PA 19101.** Equal Opportunity Employer, M/F/D/V.



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### POSTDOCTORAL ASSOCIATE POSITIONS

POSTDOCTORAL TRAINING OPPORTUNITIES are regularly available with the COLLEGE OF BIOLOGICAL SCIENCES at the UNIVERSITY OF MINNESOTA. Positions may be available in the Departments of Biochemistry; Ecology, Evolution and Behavior; Plant Biology; and Genetics & Cell Biology. Positions may also be available in the following research programs: the Bell Museum of Natural History, the Gray Freshwater Biological Institute, the Biological Process Technology Institute, the Lake Itasca Forestry and Biological Station, and the Plant Molecular Genetics Institute.

A Ph.D. degree or foreign equivalent is required. Appointment is limited to three years.

The College maintains a file of applicants for Postdoctoral Associate positions for the current fiscal year from July 1, 1992, through June 30, 1993. All applications are reviewed when each position is established. Applications from interested persons must include a personal vitae, a brief statement of research interests and experience, names, addresses, and telephone numbers of three references, and specification of departments/programs of interest. Direct application material to: Associate to the Dean, College of Biological Sciences, University of Minnesota, 123 Snyder Hall, 1475 Gortner Avenue, St. Paul, MN 55108. The University of Minnesota is an equal opportunity educator and employer.

UNIVERSITY OF MINNESOTA

### The John D. and Catherine T. MacArthur Foundation and its Program on Conscious and Unconscious Mental Processes

Present

#### PERSON SCHEMAS THEORY and CASE FORMULATION for PSYCHOTHERAPY

A Conference for Full Time Therapists, Supervisors, and Clinical Academics

**Chairs:** Mardi J. Horowitz, M.D., Professor of Psychiatry, University of California.  
Jerome L. Singer, Ph.D., Professor of Psychology, Yale University.

**Date:** Thursday-Saturday, December 3-5, 1992.

**Location:** University of California, San Francisco.

#### PROGRAM

##### THURSDAY Afternoon, December 3

- 1:00 Registration.
- 2:00 Person Schemas: Historical, Conceptual, and Measurement Issues—Peter Salovey, Ph.D., Yale University.
- 3:00 Coffee.
- 3:30 Person Schemas and Case Formulation—Mardi Horowitz, M.D., University of California, San Francisco.
- 4:30 Discussion.

##### FRIDAY Morning, December 4

- 9:00 Self Representations in Research and Clinical Practice: Implications for Cognitive and Psychodynamic Intervention—Jerome Singer, Ph.D., Yale University.
- 10:00 Coffee.
- 10:30 Attachment Theory: Applications for Psychotherapy—Aubrey Metcalf, M.D., University of California, San Francisco; Constance Milbrath, Ph.D., University of California, San Francisco; Leonard Horowitz, Ph.D., Stanford University (Chair).

##### 12:00 LUNCH

##### FRIDAY Afternoon, December 4

- 2:00 Clinical Utilization of Role Relationship Models, Core Conflictual Relationship Themes, and Structural Analysis of Social Behavior—Mardi Horowitz, M.D., University of California, San Francisco.
- 3:00 Coffee.
- 3:30 Review of Research on Role Relationship Models for Case Formulation—Tracy Eells, Ph.D., University of Louisville.
- 4:30 Multiple Representations of Self and Other: Implications for Clinical Understanding—Daniel Hart, Ed.D., Rutgers University.

##### SATURDAY Morning, December 5

- 9:00 The Role of Schemas in Cognitive Theory and Therapy—Zindel Segal, Ph.D., University of Toronto.
- 10:00 Coffee.
- 10:30 Transference: Some Thoughts on Basic Underlying Processes—Susan Andersen, Ph.D., New York University.
- 11:30 Discussion by a Panel of All Presenters.
- 12:30 Free Afternoon in San Francisco.

Registration fee for the three-day conference is \$175.00. Request for CME approval is pending, and American Psychological Association approval has been applied for. Attendees will be responsible for their own arrangements and expenses for travel, lodgings, and meals. Postdoctoral fellows on full-time stipends may apply for travel expense grants. Lodging advice will be provided.

For more information please write or fax: Julio L. Ruffini, Ph.D., PCUMP Program Manager, Langley Porter Psychiatric Institute, Box CSN-0984, University of California, San Francisco, CA 94143. Fax 415-476-7023.

The Program on Conscious and Unconscious Mental Processes of the John D. and Catherine T. MacArthur Foundation has its research center at the Langley Porter Psychiatric Institute. It has intra- and extramural task forces for collaborative and convergent studies on person schemas, defenses, and topics of thought and communication. The director of the program is Mardi J. Horowitz, M.D., Professor of Psychiatry at UCSF.



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## SCIENTIST & MANAGER DRUG SCREENING

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As a member of the Drug Discovery Group, the ideal candidate will assist Project Directors in the design of screening and secondary testing strategy, develop and adapt *in vitro* tests for high volume screening, supervise the screening effort and collaborate with Medicinal Chemistry in the selection and design of compounds for screening. These activities will require interaction and coordination with basic science, *in vivo* pharmacology and chemistry groups.

The successful individual will possess a Ph.D. in Pharmacology, Biochemistry or related discipline. This individual must have 3-5 years experience in drug discovery in a pharmaceutical company. Extensive experience with *in vitro* screening is required, including some experience with antibody-based screening, enzyme activity screens and binding assays. Experience with cell culture is highly desirable.

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Reynolds Electrical & Engineering Co., Inc. is the largest prime contractor for the U.S. Department of Energy's Nevada Operations Office (DOE/NV). Our primary responsibilities focus on operations, management, and construction at the DOE's Nevada Test Site (NTS).

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*Work Location: Mercury, Nevada*

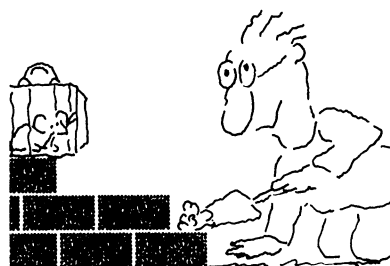
This position requires a master's degree in ecology or vertebrate biology, or a closely related field, or equivalent experience. Must have six years' practical experience in ecological and biological work and should have field experience in population census techniques. Must be familiar with field and laboratory radiation detection instruments; have practical knowledge in maintaining a herbarium, and assisting in the supervision of its management. The incumbent will organize and assist with field studies to monitor populations of small mammals and reptiles on the Nevada Test Site. The position entails supervision of college students in the collection and analysis of field data and the writing of reports. Occasionally will assist visiting biological researchers.

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## RESEARCH ASSOCIATE

The Alberta Peptide Institute is seeking a highly motivated scientist for the position of Facility Manager. This unique position has a variety of duties and responsibilities that include:

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- exceptional communication, organization, and management skills.

The Alberta Peptide Institute is a cost-recovery core facility dedicated to providing peptide products and services to the Canadian University research community. Our research efforts and services include preparation of synthetic peptides and synthetic peptide-conjugates, protein sequencing, amino acid analysis, HPLC and mass spectrometry of biomolecules. We offer competitive salaries and an excellent benefits package (\$33,951 to \$45,691 depending on qualifications and experience). Closing date for this position is September 30, 1992. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. An interested applicant should send his or her C.V. and direct three letters of reference to:

Dr. Robert S. Hodges  
Department of Biochemistry  
University of Alberta  
Edmonton, Alberta, Canada  
T6G 2H7

The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities and women.

## Antiviral Research Scientists

The Infectious Diseases Section of the PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company seeks experienced scientists to work in an expanding virology program.

The successful candidates will assist in the evaluation of antiviral compounds by performing cell-based and in vitro assays, apply molecular techniques to viral and vector constructions and use biochemical methods to evaluate protein, nucleic acid and drug interactions. Demonstrated experience with maintenance and propagation of virus stocks is essential.

Qualifications for these positions include a BS/MS in virology, microbiology, molecular biology or biochemistry with at least two years of appropriate experience.

Interested individuals should send their resume and list of references to **Box JDM-92277, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105.** Candidates may also fax their information to (313) 996-7617, "Attention Box JDM-92277." "Smoke-Free Work Environment"



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## "MINORITIES IN SCIENCE... A SEARCH FOR SOLUTIONS"

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Tuesday, October 27**



## POSITIONS OPEN

**POSTDOCTORAL POSITION** in biochemistry. Available immediately to study macromolecular structure/function and chaperone-mediated assembly of mammalian mitochondrial multienzyme complexes (*J. Biol. Chem.* 267, 12400, 1992). The candidate must have completed the research for a Ph.D. in biochemistry or related field within the past three years. Experience in protein purification and physical methods is required. The successful applicant will join an ongoing team in the areas of engineering, purification and characterization of recombinant proteins, and will participate in X-ray crystallographic studies. Send curriculum vitae including names and phone numbers of three references to: **Dr. David T. Chuang, Department of Biochemistry, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Blvd., Dallas, TX 75235-9038. UT Southwestern is an Equal Opportunity Employer.**

Two NIH-funded **POSTDOCTORAL POSITIONS** are available immediately to study: (1) mechanisms of MAP kinase activation in phorbol ester-sensitive and -resistant T-lymphocytes, (2) role of phospholipase D activation in regulating protein phosphorylation in vascular smooth muscle cells. Ph.D.'s with backgrounds in biochemistry/molecular biology and an interest in signal transduction are preferred. Please submit curriculum vitae and names of three references to: **Dr. Kathryn E. Meier, Department of Pharmacology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-2251; FAX 803-792-2475.**

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### POSTDOCTORAL ASSOCIATE POSITION

The Division of Experimental Therapeutics, Department of Radiation Oncology, is seeking a Postdoctoral Associate to study drug resistance of human tumor cells in tissue culture in patients and nude mice. A Ph.D. in cell biology, immunology, pharmacology or biochemistry or related fields is a prerequisite. Experience in molecular biology, experimental chemotherapy or cell biology preferred. A variety of analytical cytologic (laser flow cytometry) and molecular biological probes to study markers and mechanisms of drug resistance in humans are employed. Well-equipped laboratories and positive interaction with basic scientists and clinicians are offered for design and study of protocols seeking to overcome drug resistance to human patients. Send curriculum vitae with names of three references to: **Awtar Krishan, Ph.D., Department of Radiation Oncology, University of Miami School of Medicine, P.O. Box 016960 (R-71), Miami, FL 33101. The University of Miami is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available in study polysaccharide/growth factor interactions in cardiovascular disease. Knowledge of cell culture, chromatography, protein/polysaccharide chemistry and molecular biology is desirable. Send curriculum vitae and the names of three references to: **Dr. Timothy A. McCaffrey, Division of Hematology/Oncology C-608, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Equal Opportunity Employer/Affirmative Action M/F/H/V.**

A **POSTDOCTORAL POSITION** is available for an individual with expertise in molecular biology or protein chemistry. This research focuses on molecular and cellular mechanisms of activation and signal transduction by bacterial endotoxin and other inflammatory mediators leading to eicosanoid and cytokine production. The studies involve molecular biology and protein purification techniques.

Send curriculum vitae and names of three references to: **Dr. James A. Cook, Professor of Physiology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. MUSC is an Equal Opportunity Employer.**

### POSTDOCTORAL FELLOWSHIP

In molecular biology of genes expressed in connective tissues with special emphasis on mutations that produce genetic diseases. Opportunities will be provided to learn current recombinant DNA technologies and to develop new ones. Applicants must have Ph.D. in biochemistry or related area. Salary competitive. Apply to and send letters of recommendation to: **D.J. Prockop, Jefferson Institute of Molecular Medicine, Department of Biochemistry, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. We are committed to a smoke-free environment. Equal Opportunity Employer.**

## POSITIONS OPEN

**POSTDOCTORAL FELLOWSHIP.** A postdoctoral position is available immediately for recent Ph.D. to study the molecular basis of lymphocyte adhesion to microvascular endothelium in chronic inflammatory lesions using a well-characterized skin disease model. The research involves affinity labeling, protein purification and expression cloning of novel endothelial ligands. Experience in protein analysis and/or molecular cloning preferred. Send curriculum vitae and names of three references to: **Yee-Hon Chin, Ph.D., Department of Microbiology and Immunology, University of Miami School of Medicine, P.O. Box 016960 (R-138), Miami, FL 33101 (Telephone: 305-547-6137/FAX: 305-548-4623). An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL FELLOWS:** Postdoctoral positions available immediately for highly motivated scientists with training in biochemistry, molecular or cell biology to study (1) neuroimmune interactions and related aspects of signal transduction, gene expression and tumor biology and/or (2) the role of proteases in epithelial cell proliferation and differentiation. Send curriculum vitae and names of three references to: **Dr. Donald A. Chambers, Professor and Head, Department of Biochemistry, University of Illinois at Chicago, 1853 West Polk Street, (m/c 536), Chicago, IL 60612. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL TRAINING IN LEUKOCYTE BIOLOGY.** We have several **POSTDOCTORAL FELLOWSHIPS** available now for individuals interested in obtaining advanced training in leukocyte biology. Successful applicants will have the opportunity of joining and working with a diverse, multidisciplinary group of scientists interested in multiple aspects of macrophage physiology, including surface receptors, intracellular mechanisms of signal transduction cell-cell recognition, gene regulation, atherogenesis, and tumor biology. Emphasis in training is placed on analysis of a problem of the fellow's choice in the above areas with tools in contemporary cellular and molecular biology. The four faculty members in the group include individuals skilled in leukocyte biology, protein chemistry, cell biology, or molecular biology. Previous training in biochemistry, protein chemistry, receptor biology, or cellular/molecular biology would be particularly suitable, though not essential. An attractive stipend, commensurate with experience, will be offered. Openings are available at several levels of training. Interested applicants should send curriculum vitae to: **Dolph O. Adams, M.D., Ph.D., Director, Laboratory of Cellular and Molecular Biology of Leukocytes, Duke University Medical Center, Box 3712, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**

A **POSTDOCTORAL RESEARCH ASSOCIATE** position is available for a recent Ph.D. graduate to study molecular mechanisms of differentiation arrest in neoplastic myogenic cells. Applicants should have a strong background in molecular biology techniques including cloning, directed mutagenesis, and use of retroviral vectors. Send curriculum vitae with names of three references to: **Dr. Peter J. Houghton, Chairman, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.**

**RESEARCH ASSOCIATE** position available immediately to study the cellular and molecular physiology/biology of mucin secretion by airway goblet cells in human and transgenic mouse models, using a combination of video microscopy and ELISA techniques. Interested individuals with a Ph.D. in a relevant field should forward their curriculum vitae and the names of three references to: **Drs. C. William Davis and Richard Boucher, Division of Pulmonary Diseases, 724 Clinical Sciences - 7020, University of North Carolina, Chapel Hill, NC 27599. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.**

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## POSITIONS OPEN

### POSTDOCTORAL FELLOW

Position available for recent Ph.D. to study the transcriptional control of gene encoding Alzheimer amyloid precursor protein in different cell types. A background in molecular biology/molecular genetics is essential, and experience in cell culture, site-directed mutagenesis and expression cloning preferred. Salary depends on the experience. Please send curriculum vitae with references to: **Dr. Debomoy K. Lahiri, Laboratory of Molecular Neurogenetics, Institute of Psychiatric Research, Indiana University School of Medicine, 791 Union Drive, Indianapolis, IN 46202-4887. Indiana University is an Equal Opportunity/Affirmative Action Employer and Contractor, M/F.**

**RESEARCH ASSOCIATE, Step I:** Tissue culturing of human umbilical vein endothelial cells (HUVE) using ELISA system. Study interaction between HUVE/Candida/Cryptococcus cells. Techniques used: Activation of HUVE using cytokines quantitative measurements of adherence of fungi to HUVE cells. Radioisotope labeling of both Candida and HUVE cells. Immunofluorescence with highly specific monoclonal antibodies to Candida cells. Susceptibility testing of *Candida* and *Cryptococcus* to antifungal agents. Preparation of scanning and transmission electron microscopy samples. Process data and prepare research paper using IBM PC including Word Star 6, Lotus 123, Medi Line Searches/Sigma Plot. Ph.D. with a major in biochemistry or microbiology required and two years experience as Research Asst. or associate in same or similar field of research. Salary \$32,000, 40 hours per week. Job site and interview Torrance, CA. Send ad and résumé to Job#BC30039, P.O. Box 9560, Sacramento, CA 95823-0560, not later than September 11, 1992.

**RESEARCH ASSOCIATE. M.D. or Ph.D. in Physiology.** No experience in position required. Will accept two years research experience in myocardial physiology field. Academic study or research or experience background must include physiology, including animal physiology, biochemistry, histology and pharmacology and research techniques of protein and enzyme assay, histological exam, radioisotopes, cardiac motion (ultrasonic) and collateral flow, animal surgery including aseptic surgery on rabbits, dogs, and rats. Will plan and conduct research studies on preconditioning protection against myocardial ischemia/reperfusion infarction and its physiological and biochemistry mechanism. Conduct experiments in vivo and in vitro models by using electronic equipments and laboratory computer. Publish research results, conceptualize new research projects. Hours: 8:00 a.m. to 4:30 p.m., 40 hours per week. Salary \$23,000 per calendar year. Apply or send résumé to: **D. Abernathy, Alabama State Employment Service, 4130-C Government Boulevard, P.O. Box 190399, Mobile, AL 36619 or apply in person at any Alabama State Employment Service Office. Refer to job order AL4005351.**

### ASSISTANT MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI) Memorial Sloan-Kettering Cancer Center (MSKCC) invites applications for two positions as Assistant Member. The successful candidates will have demonstrated outstanding potential for a research career and will be using a combination of molecular genetic, cell biological, or modern biochemical approaches to study either 1) the cell cycle or 2) developmental genetics of vertebrates.

Applications should include curriculum vitae, a summary of current research activities and future research plans, and three letters of references. Please send applications concerning vertebrate developmental genetics to: **Dr. Elizabeth Lacy or Dr. Peter Besmer, Co-Chairs, Developmental Genetics Search Committee, Program in Molecular Biology, Sloan-Kettering Institute, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Applications concerning the cell cycle should be directed to Dr. Kenneth J. Marians, Chairman, Molecular Biology, Sloan-Kettering Institute, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. All applications must be complete by December 1, 1992.**

*SKI/MSKCC is an Equal Opportunity Employer.*

## POSITIONS OPEN

**RESEARCH ASSOCIATE** for university in central Ohio. Conducts independent research of carcinogenesis by investigating gene expression and molecular alterations of proto-oncogenes and tumor suppressor genes of environmental mutagen/carcinogen transformed human cells and cells in different stages of tumor progression; studies timing of DNA replication of proto-oncogenes in synchronized human cells and effect of benza-mide on the timing of replication; analyzes gene products using 2D gel electrophoresis; writes research reports and grant proposals. No experience required in above duties but applicants will qualify with Ph.D. in Biochemistry or Molecular Biology and two years of research experience in analysis of genomic changes of cells using genomic DNA and mRNA; polymerase chain reaction analysis; DNA sequencing; Southern and Northern blotting; immunoprecipitation; gel electrophoresis for separations of proteins, DNA and RNA; tissue culture techniques. Forty hours per week, 8:00 am to 5:00 pm, Monday to Friday, salary \$25,320 per year. Must have proof of legal authority to work permanently in the US. Send résumés in duplicate (no calls) to L. Ellison, JO#1333209, Ohio Bureau of Employment Services, PO Box 1618, Columbus, OH 43216.

**RESEARCH ASSOCIATE POSITION** is available at the USDA-Human Nutrition Research Center on Aging at Tufts University, Boston, MA. Applicants should have an interest in nutrition and immune function and specifically will study dietary and other factors influencing the production of nitric oxide in macrophages and other cells of the aging organism in a Nutrition Center with facilities for human studies, animal research, and cellular/molecular biology. For information on application procedures/forms contact Alice MacNamara (301-344-1920) USDA-ARS, Personnel Division, 6305 Ivy Lane, Rm 322, Greenbelt, MD 20770. Further information on the research program and position is available from Dr. R.L. Prior, Room 917, USDA HNRCA at Tufts, 711 Washington Street, Boston, MA 02111 (617-556-3310). Applications in response to this advertisement should be marked RA-2-015 and sent to Dr. Prior. Salary range \$32,000 to \$38,000, based upon qualifications and experience. *The U.S. Department of Agriculture/Agricultural Research Service is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT MEMBER** in Molecular Pharmacology. The department of Biochemical and Clinical Pharmacology encompasses innovative and productive programs directed at understanding molecular mechanisms of action and resistance to cancer chemotherapeutic agents. A junior faculty position is available to establish a high quality program in the area of regulation and control of genes involved in drug resistance. Preference will be given to applicants working in the area of molecular biology/pharmacology of cancer, who have an interest in development of molecular approaches to treatment. Successful candidates will be expected to develop an extramurally supported, independent research program. Applicants should send curriculum vitae and names of three references by November to Dr. Peter J. Houghton, Chairman, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. *An Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT RADIATION SAFETY OFFICER

Health Physicist to provide professional health physics support to a cyclotron/PET facility and to be the Assistant Radiation Safety Officer to a large medical and graduate research university. Responsibilities include review and development of operational HP procedures, review of research protocols, assist in the development and training of users of ionizing and non-ionizing radiation, provide assistance to faculty and staff using radioactive material at a developing PET facility and oversee the safety program of a PET cyclotron. An M.S. in Health Physics or related radiological sciences field required. Salary is competitive with benefits that include paid leave, retirement plan, liberal holiday schedule and a complete insurance package.

Send résumé to: The University of Texas Health Science Center at San Antonio, Office of Human Resources, 7703 Floyd Curl Drive, San Antonio, TX 78284-7972; or telephone (512) 567-2600. *WE ARE AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.*

## CARDIOVASCULAR PHARMACOLOGIST

### Vascular Cell Biology

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting, new opportunity for a Cardiovascular Pharmacologist to join its expanding research team. The selected individual will establish and conduct an independent research program in vascular cell biology. He/she will characterize molecular and cellular mechanisms in vascular remodeling and for treatment of restenosis. Development of novel approaches to vascular smooth muscle and endothelial cell biology relating to cardiovascular diseases will also be performed.

The successful candidate will have a Ph.D. in Molecular Pharmacology, Cell Biology or Biochemistry with one to five years of relevant postdoctoral and/or industrial experience. He/she must also have expertise in vascular smooth muscle and endothelial cell biology. Experience with extracellular matrix and/or molecular biology is preferred. A strong record of scientific publications, superior oral/written communication skills, and a high level of motivation and organization skills are also required.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as a stimulating and challenging work environment based on creativity, commitment and teamwork. For confidential consideration, please submit your C.V. and the names of three references to: SmithKline Beecham Pharmaceuticals, Employment Administrator #H342, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



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### Trustee Distinguished Visiting Minority Scholar

The Biology Department invites applications for the position of Trustee Distinguished Minority Scholar. This is a one-year appointment, beginning in the Fall of 1993, renewable for a second year. An appointment can be made at any faculty rank, including ABD. Preference will be given to candidates with specializations in molecular biology, but any biological specialty will be considered. The position carries a reduced teaching load, designed to encourage teaching, scholarship and support of students.

**A letter of application, curriculum vitae and three letters of recommendation should be sent to: Chair, Department of Biology, Skidmore College, Saratoga Springs, NY 12866.**

**Review of applications will begin immediately. We anticipate that interviewing will begin September 15th.**

Skidmore College is an affirmative action/equal opportunity employer and educator.

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## POSITIONS OPEN

**OCULAR CELL BIOLOGIST.** We seek ASSISTANT/ASSOCIATE RESEARCH SCIENTIST to direct Ocular Cell Biology Laboratory. Must have doctorate and a program of cell and molecular biology studies of cultured human ocular cells. Expertise in pharmacology and cellular transplantation highly desirable. Send curriculum vitae, statement of research goals and three references by 31 October 1992 to: David Hwang, M.D., Ophthalmology, University of California, San Francisco, CA 94143-0730.

### FLOW CYTOMETRY SPECIALIST

Flow Cytometry Specialist wanted for a multi-user flow cytometry and fluorescence activated cell sorting laboratory at the University of Virginia. Experience in the operation of flow cytometers and cell sorters is desired. Preference will also be given to candidates with training and/or experience in the biological and technical aspects of flow cytometry and cell sorting, as well as applicants with a strong background in biomedical engineering, bioinstrumentation, etc. A competitive salary (\$25,000 to \$50,000 per year) and benefits package will be offered commensurate with the experience level/qualifications of the candidate. The position is available immediately. Please send a résumé and three letters of recommendation to: Dr. Gary K. Owens, Chairman, FACS Oversight Committee, Department of Physiology, University of Virginia, School of Medicine, Charlottesville, VA 22908. The deadline for applications is September 25, 1992. The University of Virginia is an Equal Opportunity/Affirmative Action employer.

### SPECIALIST IN IMAGE ANALYSIS

The successful candidate will participate in a Division-wide program in molecular cytogenetics and will develop computer-assisted fluorescence microscopy for multi-color image acquisition and display, metaphase finding, quantitative analysis of probe intensities, automated hybridization domain enumeration, and rare event analysis. The position requires a M.Sc. or equivalent degree in applied physics, biophysics or bioengineering with at least two years experience in computer assisted microscopy, image processing, and UNIX operating system. Send letter and curriculum vitae by October 15, 1992 to: Joe Gray, Ph.D., Director, Division of Molecular Cytometry, Department of Laboratory Medicine, University of California, San Francisco, CA 94143-0808.

The University of California is an Equal Opportunity/Affirmative Action Employer. Minority, women, handicapped, and veteran candidates are encouraged to apply.

### SPECIALIST IN MOLECULAR CYTOGENETICS

The successful candidate will participate in a Division-wide program in molecular cytogenetics and will develop measurement technologies such as flow cytometry and image analysis, nucleic acid probes for chromosomal regions and new approaches to in situ hybridization. The position requires a Ph.D. or equivalent degree in physics, biochemistry, biophysics or biology with at least two years experience in analytical cytometry and biophysical instrumentation development. Experience with molecular cytogenetics, molecular cloning and PCR is desirable. Send letter and curriculum vitae by October 15, 1992 to: Joe Gray, Ph.D., Director, Division of Molecular Cytometry, Department of Laboratory Medicine, University of California, San Francisco, CA 94143-0808.

The University of California is an Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped, and veteran candidates are encouraged to apply.

### STAFF ASSOCIATE

Sought for lab well-known for clinically relevant eye research. M.S. or Ph.D. in biological science and minimum of 5 years of research experience required. Work with *In Vivo* systems important. Experience with growth factors, lipid biochemistry, inflammatory mediators, analytical instrumentation, drug formulation, and biostatistics helpful. Work collaboratively with M.D. on protocols relating to ocular surface disease. Excellent compensation. Send curriculum vitae and cover letter to: Human Resources, The Schepens Eye Research Institute, 20 Staniford Street, Boston, MA 02114. No phone calls, please.

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## POSITIONS OPEN

### PHARMACOLOGIST

A progressive and dynamic Bay Area Biotechnology Company seeks Pharmacologist for CNS/PNS drug development. Must have extensive experience with *in vivo* and *in vitro* models including experimental design, interpretation and statistical evaluation. Requires Ph.D. and at least two years experience, preferably with some industrial experience. Send résumés and reference names to: GM-S1, Neurex Corporation, 3760 Haven Avenue, Menlo Park, CA 94025.

## ANNOUNCEMENTS

### TRANSGENIC MOUSE PRODUCTION

The National Transgenic Development Facility operated by DNX, Inc. and funded by the National Institute of Child Health and Human Development (NICHD) is now accepting applications for submission of DNA constructs for the production of transgenic mice. The application deadline for the January-June 1993 microinjection session is November 2, 1992. The cost of these transgenic services is subsidized by the NICHD. For information and application materials contact DNX, Inc., 303B College Road East, Princeton, NJ 08540. Telephone (609) 520-0300. FAX (609) 520-9864.

### FLORIDA INTERNATIONAL UNIVERSITY GLASER VISITING PROFESSORSHIP IN BIOLOGICAL SCIENCES

Applications are solicited from distinguished scientists in the field of Marine Biology to visit the Department of Biological Sciences at Florida International University (FIU) during Spring semester, 1993. FIU, Florida's State university at Miami, is a dynamic and growing public university with 22,000 students. The Department of Biology has 26 faculty and 95 graduate students (M.S. and Ph.D.). The Glaser Professor will offer a short course in his/her specialty area in the field of Marine Biology (ten lectures over a 2 to 3 week period), a departmental seminar, and a university lecture of general interest. Remuneration is \$8000. Apply with letter of intent, résumé, and reprints of up to three relevant publications by October 1, 1992 to: Dr. Laurie Richardson, Department of Biological Sciences, Florida International University, Miami, FL 33199. Women and minorities are especially encouraged to apply. FIU is an Affirmative Action/Equal Opportunity Employer.

## MEETINGS

THIRD CONFERENCE ON RESEARCH POLICIES AND QUALITY ASSURANCE. Government Regulations. May 2-5, 1993, Baltimore, Maryland. Request brochure from:

Dr. ADIL E. SHAMOO  
Department of Biological Chemistry  
University of Maryland at Baltimore  
660 WEST REDWOOD STREET  
BALTIMORE, MD 21201  
OR FAX (301) 328-8297

## COURSES AND TRAINING

**POSTDOCTORAL RESEARCH TRAINING PROGRAM:** Molecular Approaches to Mental Illness, University of California, San Francisco (UCSF).

Positions open for 1992 and 1993 for individuals with M.D., M.D./Ph.D., or Ph.D. in a new NIMH funded program in areas of basic science of relevance to psychiatry including genetics and neuroscience. Training faculty are from UCSF Department of Psychiatry and basic science departments. We are particularly interested in individuals who have completed three years of psychiatric training. Women and minorities are encouraged to apply. U.S. citizens/permanent residents only send curriculum vitae to: Samuel Barondes, M.D., UCSF Box F-0984, San Francisco, CA 94143.

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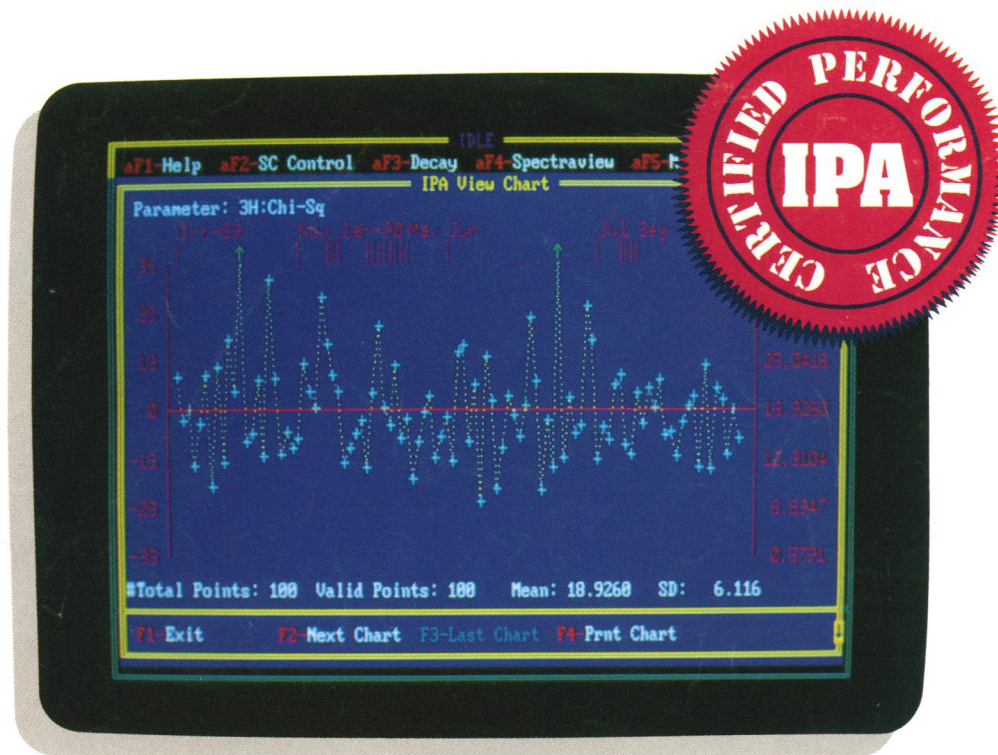
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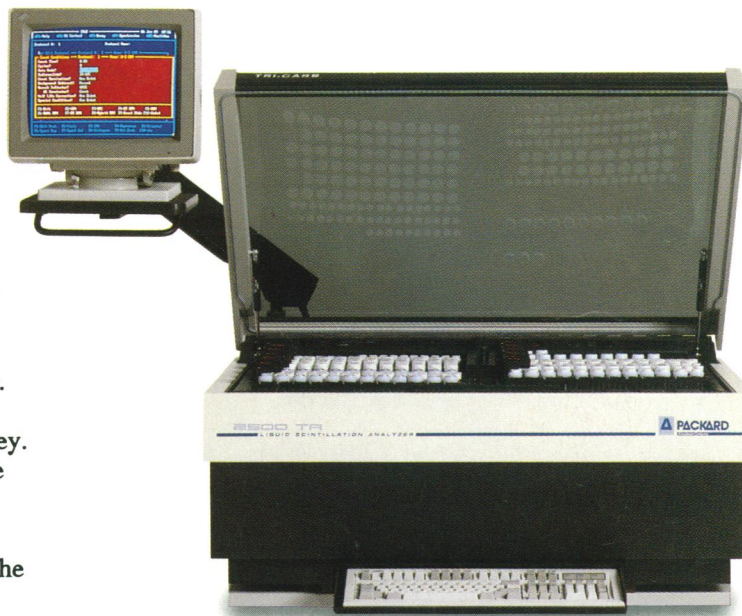
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