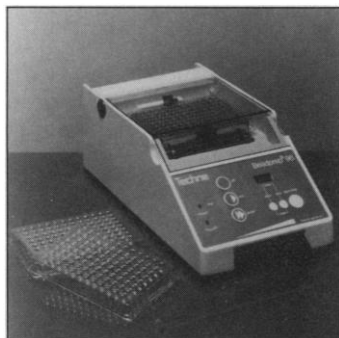


The 44th Annual Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy will be held from 7 to 12 March at the Georgia World Congress Center in Atlanta. These are some of the products that will be introduced there.

## Magnetic Bead Separator

The Beadprep 96 is an instrument for manipulating magnetic beads and DNA samples in a 96-well microplate. The Beadprep shakes and separates the magnetic beads and allows for the withdrawal of liquid without interfering with the beads, which can be pellet-



ized on the sidewall of the plate. The unit incorporates two speeds, one for gentle mixing and one for resuspension of the beads during washing procedures. The unit is fitted with a rechargeable battery for short-term use away from the workbench and a countdown timer with beeper so specific enzyme reaction tests can be easily monitored and timed. **Technne Inc. Circle 84.**

## Time-of-Flight Mass Spectrometer

The ToFSpec is a new matrix-assisted laser desorption time-of-flight mass spectrometer system for the analysis of proteins, glycoproteins, and carbohydrates up to 500 kD. The ToFSpec features a modular design that can be upgraded from a basic linear instrument for routine analysis to the highest specification levels for research and development. Accu-

racies up to 0.01% can be achieved for up to 20 kD with a single acid residue resolvable up to that mass. **Fisons Instruments. Circle 85.**

## PC-Based Workstation

The SpectraSYSTEM PC1000, a personal computer (PC)-based chromatography workstation, brings single-keyboard control to the manufacturer's liquid chromatography systems, to its multi-wavelength scanning detector, and to many of its older LABNET-based chromatography products. PC1000 features a graphical user interface with a chromatography toolbar. Advanced three-dimensional capability permits simultaneous integration of up to three signals, allowing the analyst to combine data from up to three detectors. PC1000 provides complete documentation of all acquisition conditions. **Spectra-Physics. Circle 86.**

## X-ray Fluorescence Spectrometer

New developments in the PW2400 x-ray fluorescence spectrometer include a new version of the patented Super-Sharp Tube, known as the ULET (Ultra-Light Element Tube), that provides even higher sensitivity than the standard model in the low atomic number region. Light element detection is enhanced by an expanded choice of synthetic multilayers. **Philips Analytical. Circle 87.**

## Small Microprocessor-Based pH Meter

The OAKTON pHTestr BNC is the first microprocessor-based pH instrument in its size and class



with a bayonet nut connector (BNC) electrode connector, according to its manufacturer. The pocket-sized tester features push-button calibration at pH 4.0, 7.0, and 10.0; a hold function; self-diagnostic error messages on the display; and extended pH measurement range from -1.0 to +15.0 with  $\pm 0.1$  accuracy at room temperature. The BNC electrode connector allows it to be used with virtually any style of pH electrode, such as spear-tipped, flat surface, extra long or short, extra wide or thin, that suits the application best. **Cole-Parmer Instrument Co. Circle 88.**

## Thermoelectric Stage and Controller

TESC (Thermo Electric Stage and Controller) incorporates the latest in solid-state, thermoelectric temperature-controllable devices, sensors, and circuits. Applications include wide- and small-angle x-ray diffraction studies of polymers, polymer blends, macromolecules, metallurgy, fractals, and other disordered systems. The stage has an operating range of  $-50^{\circ}$  to  $+150^{\circ}\text{C}$  and is designed for operation in a vacuum because the lower temperature limit is below the usual dew point at atmospheric pressure. It is made of solid copper (nickel-plated) with integral pas-

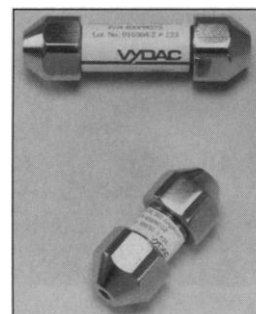
sageways and tubulation for use of a heat transfer fluid and additional heat sink if desired. **Molecular Data Corp. Circle 89.**

## Compact GC-MS

The QP-5000 is the smallest benchtop quadrupole gas chromatography-mass spectrometry (GC-MS) system in its class, according to its manufacturer. The system is designed to provide high sensitivity using a new ion source, ion optics, and electron multiplier. The QP-5000 operates in a mass range from 10 to 700 amu at a resolution of 1 mass unit or 2 M (determined at a 50% valley). The higher mass range allows the user to incorporate an optional direct inlet for qualitative analysis of less volatile samples, such as polymers. The software has the ability to build private libraries or to use the National Institute on Standards and Technology library. **Shimadzu Scientific Instruments. Circle 90.**

## Polymer HPLC Columns

A new polymer matrix designed for protein separations consists of polystyrene-divinylbenzene beads modified by chemical attachment of a hydrophilic surface. The VHP matrix is mechanically and chemically stable and is free of nonspecific protein media interactions. The matrix is available for the high-performance ion exchange separation of proteins in analytical and lab-scale preparative columns. **Vydac (The Separations Group). Circle 91.**



Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.



### ICP Mass Spectrometer

The UltraMass is a fully automated inductively coupled plasma (ICP) mass spectrometer. Unlike some ICP mass spectrometers, the UltraMass can accomplish a variety of tasks simultaneously, even while an automated run is taking place. The computer-controlled instrument can perform unattended, overnight analysis. Innovations include computer control and storage of all parameters in a method, enabling a variety of sample matrices to run without stopping; placement of the sample introduction system outside the instrument to avoid temperature changes from the plasma, previously a major source of drifts in analytical signal; and a unique safety device that measures large peaks without damage to the detector. **Varian Associates. Circle 92.**

### Capillary Electrophoresis and Ion-Pair Reagents

A broad range of ready-to-use capillary electrophoresis high-performance liquid chromatography (HPLC) reagents includes 21 buffer solutions, two capillary wash solutions, and a special HPLC grade water. Strict quality control and guarantees include no insoluble impurities, no minimal absorption over a wide wavelength range, and virtually no fluorescent impurities. The manufacturer also offers ion-pairing reagents as mobile phase additives for the separation of ionic and highly polar substances on reversed-phase HPLC columns. **Fluka Chemical Corp. Circle 93.**

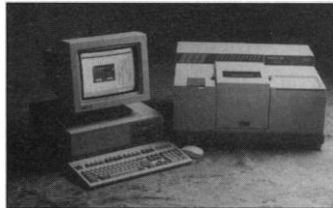
### Atomic Absorption Spectrophotometer

The MEFF-16 (multi-element furnace/flame) is an atomic absorption instrument that can determine the concentrations of all the trace elements in a sample in rapid sequence. Each sample is completed before the next one is

begun. Because the elements are determined sequentially rather than simultaneously, each can be measured under its optimum furnace conditions. The Accutrace furnace atomizer features side-heated graphite tubes. Such tubes are heated more uniformly along their length than more conventional end-heated tubes, which reduces analytical interferences. In a single sample, the furnace can use different matrix modifiers to determine individual elements. In addition to 120 samples, the autosampler can contain six standards, four matrix modifiers, and a blank solution. **Analyte Corp. Circle 94.**

### FT-IR Spectrometers

The Magna-IR series of Fourier transform-infrared (FT-IR) spectrometers, with a Microsoft Windows operating system, is com-



pletely upgradable and offers several sampling options. Most components are pinned in place and user-replaceable. The Impact 400 FT-IR spectrometer is an entry-level system for analytical, production, testing, and educational environments. **Nicolet Instrument Corp. Circle 95.**

### Automated Supercritical Fluid Extractor

The automated SFX 3560 supercritical fluid extractor performs unattended, sequential extraction and collection of up to 24 samples for environmental, food and flavor, pharmaceutical, and polymer analyses. Using safe and inexpensive CO<sub>2</sub>, the system provides typical extraction cycles of 15 to 30 min. Static and dynamic extraction steps at up to

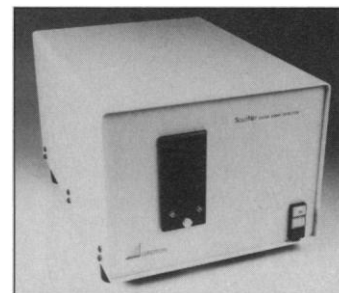
10,000 psi and 200°C, fractional collection of extracts, on-line modifier addition, and other parameters are programmable for individual samples or groups. Additional capabilities include bar-code scanning of sample cartridges and collection vials and printed reports documenting actual extraction conditions for each sample. **Isco. Circle 96.**

### Supercritical Fluid Chromatograph

The HP supercritical fluid chromatograph significantly extends the polarity range of compounds that can be analyzed by this technique. It offers an alternative separation technique for challenging gas chromatography (GC) and high-performance liquid chromatography (HPLC) analyses. It allows chromatographers to screen complex matrices that until now have required both GC and HPLC. It is available as a single- or dual-pump system. The single-pump system is used when separation needs do not require changing the mobile phase composition. The dual-pump system provides programmable, on-line mixing of mobile phase for the analysis of more polar compounds, eliminating the need for multiple tanks of premixed modifier/fluid combinations. The instrument features both gas and liquid phase detectors in a single chromatographic run. **Hewlett-Packard. Circle 97.**

### Diode Array Detector

The SoloNet 140B full-spectrum ultraviolet-visible light (190-700) diode array high-performance liquid chromatography detector features a dual source for optimum sensitivity throughout the spectral range while providing long lamp life. The SoloNet offers high detection sensitivity without loss of spectral data integrity. This is accomplished by incorporation of a digital signal processor that permits enhancement of spectral and



chromatographic data in real-time through use of sophisticated software algorithms. **Groton Technology. Circle 98.**

### Auto-Injectors and Liquid Handlers

The new XL series of auto-injectors and liquid handlers includes the ASPEC XL system (automatic sample preparation with extraction columns), which completely automates manual sample clean-up and preparation; the 231 XL and 232 XL auto-sampling injectors, which automate sampling and injecting procedures; and the 221 XL and 222 XL liquid handlers for automatic preparation and handling of liquid samples for analysis. The series features task-oriented software that requires no prior programming knowledge. **Gilson Medical Electronics. Circle 99.**

### ICP-OES Spectrometer

The Optima 3000 inductively coupled plasma optical emission spectrometer (ICP-OES) includes a new detector and patented optical system that enables users to measure the spectral background and each analyte line simultaneously. Users can measure 60 elements in less than 1 min at multiple wavelengths, without sacrificing precision or sensitivity. In addition, the Optima 3000, which occupies only 1 m<sup>2</sup> of floor space, includes more than 5000 emission lines, providing the flexibility to select alternate interference-free lines for superior results. **Perkin-Elmer. Circle 100.**



NEW EXTRA CLEAN  
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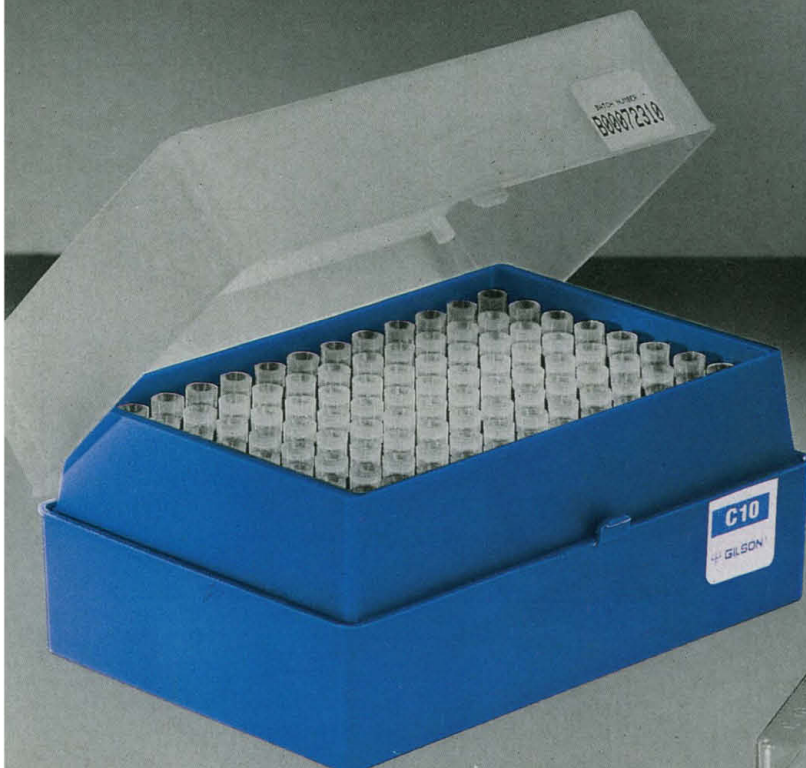
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# Science

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◆ **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training.

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Washington, DC 20005  
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## POSITIONS OPEN

**MOLECULAR BIOLOGY.** Applicants invited for tenure-track **ASSISTANT PROFESSOR** position to begin August 1993. Desired are a strong teaching commitment in the independent university tradition. To teach molecular biology, senior seminar, introductory courses for majors and non-majors, and direct independent study-research. Ph.D. required. Some teaching experience preferred. Pay commensurate with education and experience. University of Evansville is selective, residential, and co-ed with 2300 students. Send curriculum vitae, official transcripts, a statement describing commitment to undergraduate teaching, and three reference letters to: **W. P. Mueller, Chair, Biology Department, University of Evansville, Evansville, IN 47722** by March 15, 1993. *The University is an Equal Opportunity, Affirmative Action Employer.*

The University of New Mexico School of Medicine (UNMSOM) is seeking applicants with a Ph.D. in biochemistry for the position of **RESEARCH ASSISTANT PROFESSOR**. Salary in the \$28,000 per annum range and tentative start date of July 1, 1993. The primary appointment will be in the Department of Surgery with a secondary appointment in the Department of Biochemistry. Candidates should have a demonstrated ability to initiate and develop an independent research program and successfully compete for extramural funding. They should be familiar with radioimmunoassay techniques and methods of protein and enzyme analysis. A modest level of graduate and medical student and resident teaching is expected. Interested applicants should send curriculum vitae, representative publications and the names of three referees to: **Karl A. Zucker, M.D., Department of Surgery, 2211 Lomas Boulevard, NE, Albuquerque, NM 87131.** *UNMSOM is an Equal Opportunity/Affirmative Action Employer.*

### OBERLIN COLLEGE

The Biology Department invites applications for a non-continuing one-semester position as **ASSISTANT PROFESSOR** beginning August 15, 1993. The incumbent will teach an advanced course in Virology or Immunology, and several lectures in a team-taught non-majors course. Candidates must demonstrate interest and potential excellence in undergraduate teaching and have a Ph.D. or A.B.D. expected by August 1993. To be assured of consideration, a letter of application, résumé, undergraduate and graduate transcripts, and at least three letters of reference should be sent to: **David H. Miller, Chair, Biology Department, Oberlin College, Oberlin, OH 44074**, by 3 April 1993. Application materials received after this date may be considered until the position is filled. FAX: (216) 775-8960. *Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITIONS CLINICAL PHARMACOLOGY

The Division of Clinical Pharmacology at the Medical University of South Carolina seeks to fill up to two positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level over the next year. Applicants should have an M.D. or M.D./Ph.D. degree, postdoctoral training and the enthusiasm to develop independent research careers in an environment of collegiality and collaboration. We are looking for scientist/physicians with interests and capabilities in hypertension, clinical pharmacology, clinical research and/or cardiovascular diseases, channels, signal transduction mechanisms, or genetics of drug metabolism. The environment is rich in senior-level scientific and clinical experience. Competitive salaries, start-up funds, technical support and laboratory space are available. The division has a record of highly successful and continuing extramural research funding. An array of important resources which include: both inpatient and outpatient NIH-supported clinical research units (1000 hypertensive patients); extensive analytical capabilities (e.g., triple quadrupole and new NSF-supported high mass, high performance tandem mass spectrometers); and access to hybridoma, cell culture, synthetic organic chemistry, and peptide and DNA sequencing and synthesizing facilities are available. Send curriculum vitae, reprints, list of references and a summary of career goals to:

**Perry V. Halushka, M.D., Ph.D., Director**  
Division of Clinical Pharmacology  
Medical University of South Carolina  
171 Ashley Avenue  
Charleston, SC 29425

*An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

Physicians at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level—The University of Texas Medical Branch (UTMB) at Galveston, a historical Gulf Coast island community, is expanding its Geriatrics Division and Center on Aging. Positions are available for Physicians at the Assistant or Associate Professor level who are interested in clinical education, patient care, or health services research. Programs include outpatients evaluation and primary care, a day hospital, an inpatient geriatric unit, home health, and nursing home affiliations. Interested individuals should submit curriculum vitae to: **James S. Goodwin, M.D., Division of Geriatrics, UTMB, Galveston, TX 77555-0460.** *An Equal Opportunity/Affirmative Action Employer M/F/D/V. UTMB is a smoke-free/drug-free workplace. UTMB hires only individuals authorized to work in the United States.*

**ASSISTANT/ASSOCIATE PROFESSOR**—North Carolina—The Neonatology Section of the Department of Pediatrics at East Carolina University School of Medicine invites applications for tenure-track position to continue development of a research program in perinatal hypoxicischemia brain injury. Candidate must be actively engaged in this field with current or pending extramural funding and be able to develop a strong independent laboratory research program. He/She will interact with Neonatology faculty and fellows, and with basic science faculty and doctoral students in Anatomy, Biochemistry, and Pathology. Applicants should hold a Ph.D. or M.D., with postdoctoral experience in neurosciences.

Applicants should send curriculum vitae, summary of research experience, and names of three references by April 1, 1993, to: **Arthur E. Kopelman, M.D., Neonatology Section Head, Department of Pediatrics, EAST CAROLINA UNIVERSITY SCHOOL OF MEDICINE, Greenville, NC 27858-4354** or via FAX: (919) 551-3292. *Affirmative Action/Equal Opportunity Employer. Applicants must comply with Immigration Reform and Control Act.*

### Department of Physiology and Biophysics MOLECULAR/CELLULAR PHYSIOLOGIST IN MUSCLE CONTRACTION/ CELL MOTILITY University of Illinois at Chicago

The Department of Physiology and Biophysics seeks a tenure-track faculty member at the level of **ASSISTANT PROFESSOR**. We are seeking candidates with interests in molecular and cellular aspects of muscle contraction and cell motility. Applicants must have a doctoral degree, and several years of postdoctoral experience, and should be prepared to carry out independent research and to participate in the teaching activities of the department. Applicants must be able to teach mammalian physiology to graduate and health professional students, and to develop an advanced graduate-level course in their area of interest. Strengths of the department include molecular physiology of muscle contraction/cell motility, signal transduction and neurophysiology, molecular endocrinology and epithelial transport biology. Applicants should send curriculum vitae and bibliography, a statement of current research interests, and the names of three references to: **Dr. R. John Solaro, Department of Physiology and Biophysics, M/C 901, University of Illinois College of Medicine at Chicago, 901 South Wolcott Avenue, Chicago, IL 60612-7342.** *The University of Illinois is an Equal Opportunity/Affirmative Action Employer.*

The Department of **ANATOMY AND CELL BIOLOGY** invites applications for a 12-month, tenure-track, faculty position at **ASSISTANT** or **ASSOCIATE PROFESSOR** level. The Ph.D. or M.D. degree with postdoctoral experience is required. The applicant will be expected to teach in the **GROSS ANATOMY** or **NEUROANATOMY** medical school courses, and preference will be given to those with prior teaching experience. The applicant will also be expected to maintain an independent research program with extramural support, and to participate in graduate education. Current research interests in the department include developmental cellular and molecular biology and neuroscience. Applicants should send curriculum vitae, a statement of research interests, and the names of three references to: **Dr. M. A. Q. Siddiqui, Professor and Chairman, Department of Anatomy and Cell Biology, State University of New York, Health Science Center at Brooklyn, 450 Clarkson Avenue, Box 5, Brooklyn, NY 11203.** *The State University of New York is an Equal Opportunity/Affirmative Action Employer. DMC#CRO408.*



## POSITIONS OPEN

### TENURE-TRACK ASSISTANT PROFESSOR

A tenure-track assistant professor position is available at the Center for Functional and Metabolic Imaging (CFMI), in the Department of Radiology, University of Pennsylvania. Candidates should have a Ph.D. or M.D. degree with a strong background in neuroanatomy and neuroscience, as well as an ability to work with nonhuman primates in PET, SPECT and MRI imaging procedures. The position will also play a key role in bridging the gap between basic chemistry, pharmacology and clinical research. Working knowledge of image analysis and development of imaging protocols for animals and humans is required. The successful candidate is expected to join the ongoing research program at CFMI and attract extramural funding. *The University of Pennsylvania is an Equal Opportunity Employer; women and minorities are encouraged to apply.* Please send résumé to: **Dr. Hank F. Kung, Room 305, 3700 Market Street, Philadelphia, PA 19104.**

### FACULTY POSITION IN VISION RESEARCH

#### JULES STEIN EYE INSTITUTE University of California Los Angeles

The Retina Division of the Department of Ophthalmology at UCLA and the Jules Stein Eye Institute and Doris Stein Eye Research Center invite applications for the position of **ASSISTANT or ASSOCIATE PROFESSOR** of Ophthalmology to establish a research program in Retinal Transplantation. Candidates should possess a Ph.D. in Cell Biology, strong background in vision research, ability and interest in teaching, and desire to collaborate with both basic scientists and clinicians. Preference will be given to candidates with expertise in Retinal Transplantation who have demonstrated research potential and a record of extramural funding. Qualified individuals should submit curriculum vitae, three references, and a letter describing research interests and accomplishments to: **Hillel Lewis, M.D. or Dean Bok, Ph.D., Jules Stein Eye Institute, 100 Stein Plaza, UCLA School of Medicine, Los Angeles, CA 90024.** *UCLA is an Equal Employment Opportunity/Affirmative Action Employer.*

**SENIOR RESEARCH ASSISTANT PROFESSOR.** Section of Allergy/Immunology, East Carolina University School of Medicine is seeking a senior-level research associate to study anti-inflammatory mediators in asthma. Applicant must have a Ph.D. and experience in animal physiology, immunology, pharmacology, or closely related field and at least two years of postdoctoral experience. Please send curriculum vitae and three references to: **W. James Metzger, M.D., Department of Medicine, East Carolina University, Greenville NC 27858-4354.** *East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employee ability prior to final consideration for this position.*

### BIOLOGY FACULTY POSITION ASSISTANT PROFESSOR

A full-time faculty position in biology at the Assistant Professor level is available beginning with the fall 1993 semester at King's College, Wilkes-Barre, Pennsylvania. An **Animal Physiologist** with an interest and expertise in **Population Biology** is sought. The successful applicant will hold the Ph.D. and is expected to teach undergraduate biology courses for majors and non-majors and to supervise an active undergraduate research program. The successful candidate must have a primary interest and commitment to quality undergraduate instruction. This position is renewable and may lead to tenure.

The Biology Department, which will be housed in a new building by fall 1994, has an active Molecular Biology Program and a Biotechnology Group in association with other departments at the College.

A statement of teaching and research interests, curriculum vitae, and the names, addresses, and telephone numbers of three references should be submitted by interested candidates to: **William A. Shergalis, Ph.D., Dean of Arts & Sciences, King's College, Wilkes-Barre, PA 18711** by March 22, 1993.

*King's College is sponsored by Congregation of Holy Cross, is an Equal Opportunity Employer, and encourages applications from women and minorities.*

## POSITIONS OPEN

### ASSISTANT CURATOR IN INVERTEBRATES

#### American Museum of Natural History

The Department of Invertebrates invites applications for a tenure-track curatorial position to be available September 1, 1993. Salary shall be determined based upon qualifications and experience. The prime requisite is a strong research program on a major metazoan invertebrate phylum well represented in the modern marine biota, preferably with a fossil record. The focus should be on the study of its systematics, biogeography, and diversity. Curation of the Department's collections, participation on Museum committees and in the Museum's exhibition programs are other important requisites of employment. The successful candidate must have the Ph.D. in hand by time of employment. Applications should include (1) a brief statement of research interest; (2) curriculum vitae; (3) complete bibliography; and (4) three letters of recommendation from persons familiar with the applicant's qualifications. Applications must be submitted by March 15, 1993, to:

**Dr. Neil H. Landman**  
Chairman, Search Committee  
Department of Invertebrates  
American Museum of Natural History  
Central Park West at 79th Street  
New York, NY 10024-5192

*An Equal Opportunity Employer.*

The University of Illinois invites nominations and applications for the position of **HEAD, DEPARTMENT OF PLANT PATHOLOGY**. Seeking distinguished leader with experience in university, industrial, or governmental environment, strong credentials in research, extension or resident instruction, and proven leadership capabilities. Candidates must have Ph.D. in Plant Pathology or related discipline and an active research program. Salary negotiable with appointment to begin by August 21, 1993, or as soon as possible. *The University of Illinois is an Affirmative Action Employer and welcomes applications from women and minorities.* Applications received by April 15, 1993, are assured full consideration, but the search will continue until the position is filled. Applicants should send a statement of administrative philosophy and qualifications, curriculum vitae, and the names, addresses, and telephone numbers of five references to: **Roscoe L. Pershing, Search Committee Chair, 1304 West Pennsylvania Avenue, Urbana, IL 61801.**

**DEPARTMENT CHAIRPERSON, ANATOMICAL SCIENCES.** The University of Pacific School of Dentistry, 2155 Webster Street, San Francisco, CA, 94115, invites applications and nominations for this full-time, tenure-track position, available January 1, 1994. Responsibilities include coordinating departmental instruction, conducting independent research, managing and developing faculty, and providing service. Required: Ph.D., teaching experience, and established record of anatomical science research with ability to attract independent research funding. *Equal Opportunity/Affirmative Action Employer.* Send application with curriculum vitae to: **Dr. David Chambers, Associate Dean for Academic Affairs, by June 1, 1993.**

### ASSISTANT PROFESSORSHIP IN MEDICINE/GASTROENTEROLOGY

The Division of Gastroenterology in the Department of Medicine of the College of Physicians and Surgeons of Columbia University invites applications for a junior faculty position with a predominant research emphasis. M.D.'s who have three or more years of basic science training in cell or developmental physiology/biology related to the GI tract or liver, and who can develop an independently funded research program are encouraged to apply. A background of two or more years of training in internal medicine is required; one or more years of clinical training in Gastroenterology or Hepatology is desirable but not essential. Qualified individuals should submit curriculum vitae and a statement describing their research experience and plans to: **Michael Field, M.D., Director; Division of Gastroenterology; College of Physicians and Surgeons of Columbia University; 630 West 168th Street, 10-508; New York, NY 10032.** *Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

USEPA Environmental Research Laboratory—Corvallis, Oregon. **TECHNICAL DIRECTOR, Environmental Monitoring and Assessment Program—Surface Waters (EMAP).** EMAP is a national monitoring program conducted by the EPA in cooperation with states and other agencies. The Surface Waters component is responsible for designing and implementing a program to estimate the condition of the nation's lake and stream resources.

Candidates must have education and/or experience equivalent to a Ph.D. in physical science, engineering, or mathematics plus experience in managing a national research or monitoring program. Demonstrated skills in written and oral communications are essential. *U.S. citizenship is required.*

For further information and an application package, contact: **Pam Taylor, USEPA, ERL—Corvallis, 200 SW 35th Street, Corvallis, OR 97333.** All inquiries must be received by March 19, 1993. *The USEPA is an Equal Opportunity Employer.*

### GENE THERAPY CENTER DIRECTOR UNIVERSITY OF CALIFORNIA, SAN DIEGO SCHOOL OF MEDICINE

The University of California, San Diego is seeking to appoint a Director for a newly established Gene Therapy Center (GTC). This appointment will be at the Associate or Full Professor level, with tenure. Salary will be commensurate with experience and based on UC pay scales. The GTC Director is expected to coordinate and facilitate interdepartmental programs on gene therapy with the aim of providing a central organization for the development of new methods of gene transfer, and direct them toward the treatment of human disease. The Director will be expected to take advantage of the resources that exist in the San Diego community and to develop a coherent plan to achieve the general goals of GTC. The establishment of GTC has a high priority backing of the University; resources will be available to initiate this program. Qualified candidates should send curriculum vitae, a letter expressing their interest and a brief summary of their view of the future of gene therapy to: **Dr. John F. Alksne, Gene Therapy Center Search Committee, UCSD School of Medicine, 9500 Gilman Drive, La Jolla, CA 92093-0602** by no later than March 31, 1993.

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

### ENDOWED CHAIR IN PEDIATRIC PULMONARY MEDICINE

An endowed Chair in Pediatric Pulmonary Medicine at the University of California, San Diego, is available to be filled immediately. This position, supported by tenured appointment as Professor or Associate Professor, offers a unique opportunity for applicants with interest in the molecular and cellular basis of pediatric pulmonary disease. Additional recruitments for pulmonologists in the Departments of Pediatrics and Medicine provide the possibility of establishing a focused area of excellence in pulmonary disease.

Individuals should submit curriculum vitae by March 26, 1993, to: **Roger G. Spragg, M.D., Chair, Pediatric Pulmonary Search Committee, Medical Service (111), VA Medical Center, 3350 La Jolla Village Drive, San Diego, CA 92161.** Salary related to rank and step of appointment within UCSD's salary schedule. *Affirmative Action/Equal Opportunity Employer.*

### CHAIR OF PHARMACOLOGY

#### Northwestern University Medical School

Applications and nominations are invited for the position of Professor and Chairman, Department of Pharmacology. Applicants are sought with qualifications that include international stature in their chosen areas of research, and ability to provide academic leadership at the forefront of pharmacology and related interdisciplinary areas of research and education. Applicants should have demonstrated qualifications in education and administration. To ensure full consideration, applications must be received by April 30, 1993. *Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.* Address nominations or applications (curriculum vitae, publications, grant support, educational and administrative experience) to: **Dr. Patricia G. Spear, Chairman, Pharmacology Chair Search Committee, Northwestern University Medical School, Department of Microbiology-Immunology, W213, 303 East Chicago Avenue, Chicago, IL 60611.**





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## Research Scientist II/Senior Research Associate

(Pos. #64604-29)

This position will assist in the discovery and characterization of therapeutic targets for the development of agents for the treatment of Alzheimer's Disease and age-related dementia's. The major responsibilities of this position will include the development of immunological and oligonucleotide probes and eukaryotic expression systems. Position will be filled at the Research Scientist II or Senior Research Associate level. The level of responsibility to be assigned will depend upon the individual applicant's educational background and experience level.

**Research Scientist II:** Candidates need a B.S. or four-year college curriculum with a major concentration in Biochemistry, Immunology or Molecular Biology PLUS four years of experience in Biochemistry, Immunology or Molecular Biology; OR a Master's degree in Biochemistry or Immunology PLUS two years of experience indicated above; OR a Ph.D. in Biochemistry or Immunology. Scientific writing assessment required.

**Senior Research Associate:** Candidates need a B.S. or four-year college curriculum with a major concentration in Biochemistry, Immunology or Molecular Biology PLUS six years of experience in Biochemistry, Immunology or Molecular Biology; OR a Master's degree in Biochemistry or Immunology PLUS four years of experience indicated above; OR a Ph.D. in Biochemistry or Immunology PLUS one year of experience as indicated above. Scientific writing assessment required.

## Research Scientist I/Research Scientist II

(POS. #64568-29)

This individual will perform laboratory experiments to support existing and future research and drug discovery/development programs of new agents for the treatment of cardiovascular disease. The principle objective is to maintain a drug discovery and development program for agents to treat heart failure. Position will be filled at the Research Scientist I or Research Scientist II level. The level of responsibility to be assigned will depend upon the individual applicant's educational background and experience level.

**Research Scientist I:** Candidates need a B.S. or four-year college curriculum with a major concentration in a biological science PLUS two years of experience in a cardiovascular physiology/pharmacology laboratory OR a Master's degree in a biological science. Scientific writing assessment required. Other factors to be considered include experience in *in vivo* and *in vitro* hemodynamic monitoring, knowledge of *in vivo* surgical techniques and experience with computers/software.

**Research Scientist II:** Candidates need a B.S. or four-year college curriculum with a major concentration in a biological science PLUS four years of experience in cardiovascular physiology/pharmacology OR a Master's degree in physiology or pharmacology PLUS two years of experience in cardiovascular physiology/pharmacology OR a Ph.D. in cardiovascular physiology or pharmacology. Scientific writing assessment required. Other factors to be considered include experience in *in vivo* and *in vitro* cardiac and/or vascular procedures, experience in acute and chronic *in vivo* studies and knowledge of computer/software data collection and analysis.

## Research Scientist I/Research Scientist II

(POS. #64606-29)

This individual will take part in biochemical studies to support drug discovery programs and characterize the molecular basis of cardiovascular disease. This position will be filled at the Research Scientist I or Research Scientist II level. The level of responsibility to be assigned will depend upon the individual applicant's educational background and experience level.

**Research Scientist I:** Candidates need a B.S. or four-year college curriculum with a major concentration in the biological sciences PLUS two years of experience in pharmacology OR a Master's degree in biochemical pharmacology. Scientific writing assessment required. Other factors to be considered include experience in radioligand binding techniques and cardiovascular pharmacology.

**Research Scientist II:** Candidates need a B.S. or four-year college curriculum with a major concentration in the biological sciences PLUS four years of experience in pharmacology OR a Master's degree in biochemical pharmacology PLUS two years of experience in cardiovascular pharmacology OR a Ph.D. in biochemical pharmacology. Scientific writing assessment required. Other factors to be considered include experience in radioligand binding techniques, fluorescent dye techniques and knowledge of computers/software.

At Burroughs Wellcome Co., you will enjoy a compensation and benefits package that is among the best in the pharmaceutical industry, along with the advantages of being part of an innovative pharmaceutical leader. Please send your resume, indicating position number in your cover letter, by March 15, 1993, to: Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 248-8347.



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University**

**Graduate School**

## **Research Training Opportunities**

**Hahnemann University  
Graduate School  
Broad & Vine  
Mail Stop 480  
Philadelphia, PA 19102-1192  
(215) 762-8388**

Hahnemann University is a private academic health sciences center dedicated to excellence through the provision of higher education, patient care, research and community service. Located in center city Philadelphia, Hahnemann University's Graduate School offers more than 25 advanced study programs in the basic biomedical sciences and health-related fields. Each program is geared to enhance the student's opportunity for individual learning and research. Our faculty are outstanding scientists, clinicians and academicians and our laboratory facilities are state-of-the-art.

Tuition scholarships and stipends for Ph.D. or M.D./ Ph.D. students are available for qualified applicants.

### **SELECTED AREAS OF RESEARCH:**

Neuroscience, cancer biology, radiation biology, immunology, molecular biology, public health and preventive medicine, cardiovascular biology, clinical research, addiction research, behavioral research, biomechanics, and orthopedic and pediatric physical therapy.

### **DEGREE PROGRAMS INCLUDE:**

Anatomy, Biochemistry, Clinical Psychology, Microbiology, Molecular Biology & Biotechnology, Neuroscience, Experimental Pathology, Pharmacology, Advanced Physical Therapy with specialization in Orthopedics or Pediatrics, Physiology, Radiation Sciences

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### **SCIENCE MANAGERS**

We are looking for Ph.D.-level scientists (or equivalent) with 8-10 years' experience to manage groups of scientists and associates in the following research areas:

- Immunology (background in mucosal immunology a plus)
- Molecular Biology/Genetics (background with bacterial systems preferred)

Prior management or supervisory experience is essential.

At Lederle-Praxis, you'll enjoy a professional atmosphere and a competitive salary and benefits package. Please send a resume to: Human Resources Department, Lederle-Praxis Biologicals, 211 Bailey Rd., West Henrietta, NY 14586-9728. An Equal Opportunity Employer.



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**ULTIMISSIME NOTIZIE NOTICA DE ULTIMA HORA**





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

The New Energy and Industrial Technology Development Organization (NEDO), a Japanese governmental implementing agency supervised by the Ministry of International Trade and Industry (MITI) of Japan, has been carrying out an International Joint Research Program since 1988. This program aims to contribute to the enhancement of the international level of industrial technology as well as to the advancement of international exchange by supporting international joint research teams which conduct superior research. In addition to supporting international joint research teams which conduct original and innovative basic research in the materials area, international joint research teams which conduct research in the energy area and the global environment area will be provided with grants from FY 1993. The program in the global environment area will be conducted jointly with the Research Institute of Innovative Technology for the Earth (RITE).

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

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

FY 1983's program is show below.

Research Area	Field of Research	Amount of Each Grant	Number of Themes to be Adopted	Recipients of Applications
Materials	1) Basic research concerning the investigation and elucidation of materials.  2) Basic research concerning the practical use of materials	about 30,000,000 yen in FY 1993	5 themes	NEDO (Note a.)
Energy	Practical research on power generation technologies using oil-alternative energy, on load leveling technologies and on global environment conservation related to those technologies.	about 30,000,000 yen in FY 1993	2 themes	
Global Environment	1) Basic research on conservation and improvement of the global environment	about 24,000,000 yen in FY 1993	2 themes	RITE (Note b.)
	2) Practical research concerning the production, generation and use of oil-alternative energy which contributes to the conservation and improvement of the global environment.	about 30,000,000 yen in FY 1993	2 themes	

(Recipients of Applications)

Note a. Materials and energy areas

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

Note b: Global environment area

Research Proposals Reception Section.  
Research Planning Department  
Research Institute of Innovative Technology for the Earth (RITE)  
Address: 4F. Shin-Kyoto Center Bldg.  
Karasumanishi-iru  
Shiokouji-dori, Shimogyo-ku, Kyoto 600 Japan  
Phone No.: 075-361-3611  
Telefax No.: 075-361-5607

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

The application period is from February 25, 1993 to May 25, 1993. No application will be accepted later than May 25th.

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



## POSITIONS OPEN

The Department of Biology at Northern Michigan University invites applications for a tenure-earning position which will begin in August 1993. The candidate should have a Ph.D. in Physiology or related field, research experience, and undergraduate teaching experience. Duties include undergraduate and master's-level supervision of research and instruction in physiology, human anatomy, and ecology. Applications will be received until the position is filled, screening for interviews will begin on March 15, 1993. Send letter of application, résumé and three letters of recommendation to: **Dr. Thomas G. Froiland, Head, Department of Biology, Northern Michigan University, Marquette, MI 49855-5341, Telephone: 906-227-2310. An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

**RESEARCH ASSISTANT PROFESSOR, TENURE-TRACK, FUNDED POSITION** available July 1, 1993, to study Alzheimer's disease, other neurodegenerative diseases and experimental models. Experience in protein purification and sequencing and/or molecular genetics desirable. Research activity can be conducted independently or as part of a large, well-established group. Teaching responsibilities optional. Send résumé to: **Pierluigi Gambetti, M.D., Division of Neuropathology, Institute of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106. CWRU is an Equal Opportunity/Affirmative Action Employer.**

### MOLECULAR BIOLOGY—CANCER

**Division of Cancer Biology  
Department of Pathology and Cell Biology  
Jefferson College of Medicine**

The new Division of Cancer Biology, Thomas Jefferson University in Philadelphia is seeking qualified investigators for positions at the level of **POSTDOCTORATE, RESEARCH ASSOCIATE and INSTRUCTOR** with expertise in molecular biology. Research includes identification and characterization of oncogene rearrangement and DNA binding proteins in the pathogenesis of leukemia and non-Hodgkin's lymphoma. Work also includes quantification of residual disease in hematologic malignancies. Candidates should have a Ph.D. and/or M.D. Positions and salary are competitive and commensurate with experience. Forward curriculum vitae, summary of professional interest and names of three references to: **Jorge J. Yunis, M.D., Professor, Department of Pathology and Cell Biology, Thomas Jefferson University, Jefferson Alumni Hall, Room #224, Philadelphia, PA 19107.**

### FACULTY POSITION: RESEARCH INSTRUCTOR

The Department of Obstetrics and Gynecology at the University of Alabama at Birmingham (UAB) has a faculty position open in the Division of Maternal Fetal Medicine. The applicant should have a Ph.D. or equivalent in Epidemiology, Biostatistics, and/or Maternal and Child Health with extensive experience in MCH Epidemiology, Biostatistics and analysis of large data sets. Experience in mainframe as well as PC use and expertise in SAS is required. A strong research background with at least 5 years of experience and a record of publications and presentations are also required.

Please send curriculum vitae and the names of three references by May 15, 1993, to: **Robert L. Goldenberg, M.D., Department of Obstetrics & Gynecology, The University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294. UAB is an Equal Opportunity/Affirmative Action Employer.**

**BIOLOGICAL OCEANOGRAPHER** specializing in micro-organisms, phytoplankton, or zooplankton. **FACULTY POSITION** in the Department of Marine and Coastal Sciences, Rutgers, the State University of New Jersey. Strong record of published research and grant support required for appointment. Teaching in area of specialization at the graduate/undergraduate levels and training of graduate students expected. Please send curriculum vitae, a statement of research and teaching interests, and the names of at least three references by April 19, 1993, to: **Dr. Frederick Grassle, Institute of Marine and Coastal Sciences, Box 231, Rutgers, The State University of New Jersey, New Brunswick, NJ 08903. Rutgers University is an Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### FACULTY POSITIONS

Visual Science Research, the Department of Ophthalmology at the University of Wisconsin-Madison, has openings for three faculty positions. Candidates must have an M.D., Ph.D. degree with at least two years of postdoctoral research experience, and a commitment to developing an independent, extramurally funded research program in the areas of immunology (cell-mediated immune responses, inflammation, and/or the role of cytokines), molecular cell physiology (function of biological responses modifiers, e.g., growth factors), molecular/cellular visual neuroscience (structure and function of cells in the visual system) or human molecular genetics (map and identify genes involved in ocular diseases).

Successful candidates need to have previous experience in the visual system, but must demonstrate an interest in working in this area and foster collaborative interaction between research and clinical faculty. Interested individuals should submit curriculum vitae, description of current research, plans for the future and the name of three references to: **Curtis R. Brandt, Ph.D., Vice Chairman—Research, Department of Ophthalmology, 6630 Medical Sciences Center, 1300 University Avenue, Madison, WI 53706-1532. The University of Wisconsin is an Equal Opportunity Employer. JUNE 1, 1993, APPLICATION DEADLINE.**

**FACULTY POSITION IN GENETICS—DUKE UNIVERSITY MEDICAL CENTER** invites applications for a faculty position in genetics, with a focus on mammalian or human genetics. This appointment can be made at any level. The research environment is excellent and an extremely attractive and generous package of research support is available. Interested individuals should forward curriculum vitae, statement of research plans, and the names of three referees to: **Dr. Joseph R. Nevins, Section of Genetics, Howard Hughes Medical Institute, Duke University Medical Center, P.O. Box 3054, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**

### HARVARD MEDICAL SCHOOL PROFESSOR OF MICROBIOLOGY AND MOLECULAR GENETICS

The Department of Microbiology and Molecular Genetics at Harvard Medical School is seeking a tenured Professor whose primary research interest is in the area of bacterial physiology and genetics. Candidates should be established leaders in prokaryotic research and experienced research mentors of Ph.D. students and postdoctoral fellows. The successful candidate will be expected to participate actively in teaching both medical students and graduate students.

Candidates should send curriculum vitae and statement of research interests to: **Frederick M. Ausubel, Chairperson, Microbiology and Molecular Genetics Search Committee, Department of Molecular Biology, Massachusetts General Hospital, Fruit Street, Boston, MA 02114.**

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

### POSTDOCTORAL ASSOCIATE

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 experience. Please send curriculum vitae with references to:

**Debomoy K. Lahiri, Ph.D.  
Laboratory of Molecular Neurogenetics  
Institute of Psychiatric Research  
Indiana University School of Medicine  
791 Union Drive  
Indianapolis, IN 46202-4887**

### CELL BIOLOGIST

**POSTDOCTORAL POSITION** requires strong expertise in epithelial cell/fibroblast tissue culture, microscopy and immunohistochemistry, extracellular matrix biochemistry, and basic statistical analyses. Send curriculum vitae and three references to: **Kerry Assil, M.D., The Eye Institute, Saint Louis University School of Medicine, 3655 Vista, St. Louis, MO 63110. Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available April 1, 1993. Chemist or biochemist needed to identify compounds responsible for major histocompatibility complex determined odortypes in mice. The position requires familiarity with liquid chromatography techniques and an ability to communicate effectively with biologists. Send letter with statement of research interests, curriculum vitae, and three references to: **Dr. Alan G. Singer, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, PA 19104.**

### POSTDOCTORAL POSITIONS PROTO-ONCOGENES, GROWTH FACTORS

Available to study: (1) function of the *Wnt* family of secreted factors in tumorigenesis and development, including *Wnt* signal transduction (*Wnt* reviewed in *Cell* 69:1073, 1992) or (2) cloning and characterization of novel proto-oncogenes by mouse mammary tumor virus insertional mutagenesis (see *PNAS* 90:740, 1993). Experience in molecular biology or protein biochemistry is desired. Excellent facilities in a new research tower. Send curriculum vitae and names of three references to: **Gregory Shackleford, Ph.D., University of Southern California School of Medicine, Division of Hematology-Oncology, M/S 126, Children's Hospital Los Angeles, Los Angeles, CA 90027-6016. Equal Opportunity Employer.**

St. Jude Children's Research Hospital, a premier research center for catastrophic diseases and biomedical research, offers the **JOHN H. SUNUNU ENDOWED FELLOWSHIP** in Basic Science Research. The fellowship was established by the American Lebanese Syrian Associated Charities/St. Jude Children's Research Hospital Boards of Governors and Directors in honor of Mr. Sununu's contributions to the political life of the nation as an American of Arabic ancestry.

The fellowship is open to a junior investigator with an M.D. or Ph.D. degree who seeks training experience in one of the specialty areas of basic biomedical research available, which include: biochemistry, genetics, immunology, molecular pharmacology, tumor cell biology and virology/molecular biology.

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

Application deadline: 1 May 1993

Award notification: 15 June 1993

Beginning date: 1 July 1993 or after.

Send inquiries to:

**Allan Granoff, Ph.D.  
Director's Office  
St. Jude Children's Research Hospital  
P.O. Box 318  
Memphis, TN 38101-0318 USA**

**EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.**

### POSTDOCTORAL FELLOWSHIPS

**Division of Nutrition, Department of Biochemistry  
Medical College of Pennsylvania (MCP),  
Philadelphia**

The Division of Nutrition has positions available for postdoctoral research and training in biomedical nutrition. Preference will be given to recent graduates with a Ph.D. in biochemistry, nutrition, cell and molecular biology or a related discipline, and to individuals with an M.D. degree who desire a research fellowship for 2 to 3 years. Research projects in the Division include studies on atherosclerosis, lipid and lipoprotein synthesis and degradation; use of stable isotopes and mass spectrometry to study diet-related changes in lipoprotein turnover or the impact of hypertension on glucose metabolism; enzymes involved in cholesterol ester and retinyl ester hydrolysis; roles of retinoid-binding proteins in retinol esterification and oxidation; functions of vitamin A in immunity and aging; antioxidant properties of plasma carotenoids. Dietary studies in humans as well as experimental studies in animals, cell cultures and at the molecular level are being conducted. To apply, submit current curriculum vitae, a statement of research experience and future goals, and the names, addresses and telephone numbers of three references to: **Dr. A. Catharine Ross, Director, Division of Nutrition, Department of Biochemistry, Medical College of Pennsylvania, 2900 Queen Lane, Philadelphia, PA 19129. MCP is an Equal Opportunity/Affirmative Action Employer.**



## COMPUTATIONAL CHEMISTS

Agouron Pharmaceuticals, Inc., a recognized pioneer and leader in the field of rational drug design, is seeking one or more MS/BS level scientists to join its staff in San Diego. Successful candidates will have responsibilities in one or both of the following areas:

- 1) development of new computational chemistry software using strong programming skills in Fortran and C,
- 2) application of existing computational chemistry software using training, experience, or aptitude in physical chemistry or a related area.

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Human Resources — Dept. RB



**Agouron**  
Pharmaceuticals, Inc.

3565 General Atomics Court  
San Diego, California 92121

## Two faculty positions in a Program on HIV pathogenesis University of Toronto, Faculty of Medicine

The University of Toronto wishes to recruit an established scientist with an international reputation in molecular retrovirology or cellular immunology as applied to the study of the pathogenesis of disease caused by Human Immunodeficiency Virus. The successful candidate will be offered a position at the level of Associate Professor or Professor in the Department of Medicine with cross-appointment to the appropriate basic medical science department. Another scientist will be appointed at the Assistant Professor level. Compensation will be commensurate with qualification and experience. The appointment will be made as soon as possible after July 1, 1993.

The University and the Research Institutes of its affiliated teaching hospitals offer an outstanding scientific environment with particular strength in immunology, molecular genetics, signalling and transcription. In addition there are excellent opportunities to access clinical material and to collaborate with clinical investigators interested in HIV pathogenesis. The successful candidate will be strongly encouraged to establish collaborative links with local basic and clinical investigators.

Interested applicants should submit a covering letter outlining current research interests, a curriculum vitae, and the names and addresses of three referees to: Dr. J. Brunton, Department of Microbiology, The Toronto Hospital, NU13-124, 200 Elizabeth Street, Toronto, Ontario, M5G 2C4, Canada. The closing date for applications is May 1, 1993.

In accordance with its employment equity policy, the University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian Immigration requirements this advertisement is directed to Canadian citizens and permanent residents.



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## Research Scientist I

(POS. #64377-29)

This individual will perform *in vivo* and *in vitro* studies to gather information for the discovery and development of potential hypolipidemic/antiatherosclerotic agents. Candidates need a B.S. or four-year college curriculum with a major concentration in biochemistry, pharmacology, physiology or related field PLUS two years of experience in a biochemical, pharmacological or related field; OR a Master's degree in biochemistry, pharmacology, physiology or related field. Scientific writing assessment required. Other factors to be considered include experience in an *in vivo* and *in vitro* laboratory setting working with radioactive materials and knowledge of lipid and/or lipoprotein metabolism and biochemical techniques.

## Research Scientist I

(POS. #64400-29)

This individual will perform *in vivo* and *in vitro* studies towards the discovery and development of compounds which favorably affect lipoprotein and cholesterol metabolism. Candidates need a B.S. or four-year college curriculum with a major concentration in biochemistry, pharmacology or related field PLUS two years of experience in biochemical, pharmacological or related field; OR a Master's degree in biochemistry, pharmacology or related field. Scientific writing assessment required. Other factors to be considered include experience in an *in vivo* and *in vitro* laboratory setting working with radioactive materials and knowledge of lipid and/or lipoprotein metabolism.

## Research Scientist I

(POS. #64129-29)

This individual will conduct *in vivo* and *in vitro* experimental studies in cardiovascular drug discovery. Specifically, these preclinical studies are intended to identify and characterize compounds that are antagonists of endothelin receptors or inhibitors of endothelin synthesis. Candidates need a B.S. or four-year college curriculum with a major concentration in a biological or biochemical science PLUS two years of experience in receptor research OR a Master's degree in a biological or biochemical science with an emphasis on receptor research. Scientific writing assessment required.

At Burroughs Wellcome Co., you will enjoy a compensation and benefits package that is among the best in the pharmaceutical industry, along with the advantages of being part of an innovative pharmaceutical leader. Please send your resume, indicating position number in your cover letter, by March 15, 1993, to: Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 248-8347.



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## POSITIONS OPEN

### POSTDOCTORAL POSITION RNA EDITING

Position available in group studying RNA Editing and other aspects of gene regulation in trypanosomes. Background in molecular biology essential; experience in protein biochemistry desirable. Send curriculum vitae, statement of research interests, and three letters of recommendation to: **Dr. Kenneth Stuart, Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109. Equal Opportunity Employer.**

### POSTDOCTORAL FELLOW

Position immediately available to conduct study on the molecular basis of drug resistance within the Molecular Oncology program. Experience in drug resistance and/or molecular biology required. Please send curriculum vitae and 2 letters of reference to: **Gary Kruh, M.D., Ph.D., c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer, M/F.**

### POSTDOCTORAL RESEARCH POSITION IMMUNOLOGY/MICROBIOLOGY

Position available immediately to study "non-classical" Class I MHC product-mediated presentation of bacterial antigens. Prior training in immunology, microbiology or biochemistry required. Send curriculum vitae and the names of three references to: **Dr. Roger Kurlander, Box 3486, Duke University Medical Center, Durham, NC 27710. Equal Opportunity/Affirmative Action Employer.**

St. Jude Children's Research Hospital, a premier research center for children's catastrophic diseases and biomedical research, offers the **LEON JOURNEY FELLOWSHIP** in Basic Science Research. It honors the memory of Dr. Leon Journey, a distinguished cell biologist and electron microscopist who served on the institution's staff for 10 years. The fellowship is open to a junior investigator with an M.D. or Ph.D. degree who seeks training experience in one of the specialty areas of basic biomedical research available, which include: biochemistry, genetics, immunology, molecular pharmacology, pharmacodynamics, tumor cell biology and virology/molecular biology.

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

Application deadline: 1 May 1993

Award notification: 15 June 1993

Beginning date: 1 July 1993 or after.

Send inquiries to:

**Allan Granoff, Ph.D.**  
Director's Office

**St. Jude Children's Research Hospital**  
P.O. Box 318  
Memphis, TN 38101-0318 USA

**EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.**

### FELLOWSHIP IN MOLECULAR GENETICS

A postdoctoral position is available for 2 to 3 years for candidates with expertise in molecular genetics to join an established group investigating the molecular genetics of inherited neurologic diseases including Alzheimer's Disease. The successful candidate must have Ph.D. or equivalent in molecular biology or molecular genetics. Demonstrable ability for independent research and prior experience in positional cloning are assets. Salary commensurate with experience on NIH scale. Apply to: **Dr. P. St. George-Hyslop, Tanz Neuroscience Building, University of Toronto, Ontario, Canada, M5S 1A8.**

### RESEARCH ASSOCIATE

**Duke University Medical Center**

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

## POSITIONS OPEN

**POSTDOCTORAL FELLOWSHIP TO STUDY RETINOIDS IN THE IMMUNE SYSTEM.** We have found novel cellular retinoids to be critically important for lymphocyte activation (*Science* 254, 1645, 1991). Recent Ph.D. graduates in Immunology or Biochemistry who wish to strike out into new territory are invited to join our study of these retinoid metabolites in the context of cellular immunology, signal transduction, gene regulation. Interested candidates should send their credentials including reference letters to: **Dr. Ulrich Hammerling, Sloan-Kettering Institute, New York, NY 10021. An Equal Opportunity Employer.**

**POSTDOCTORAL/RESEARCH ASSOCIATE IN NEUROSCIENCE** available May 1993 to study brain descending systems controlling movement in primates. Experiments involve single unit recording from cerebral cortex and brainstem in awake monkeys. Expertise in electrophysiology, computerized data acquisition and behavioral work is desirable. Send applications (curriculum vitae and names of references) to: **Dr. Paul Cheney, Smith Research Center, University of Kansas Medical Center, Kansas City, KS 66103. Telephone: 913-588-5970.**

### MARINE ECOLOGY

**POSTDOCTORAL RESEARCH ASSOCIATE** in the following fields: Larval, Plankton, and/or Community Ecology. One-year appointment in biological invasion ecology is available July 1, 1993, to investigate the potential invasion of non-indigenous marine organisms in Chesapeake Bay (and other estuaries). Funds also available for full-time research assistant. Ph.D.; strong working knowledge of invertebrate zoology; experience in meroplankton and/or holoplankton useful; statistical skills. Research is based at Smithsonian Environmental Research Center (SERC) in Edgewater, Maryland. MAIL/FAX by April 2, 1993, letter of interest, résumé, names of three references to: **Dr. James T. Carlton, Maritime Studies Program, Williams College—Mystic Seaport, Mystic, CT 06355. Telephone: 203-536-7769, FAX: 203-572-5329. Affirmative Action/Equal Opportunity Employer.**

### RESEARCH ASSOCIATE POSITION

**Tufts University School of Medicine**  
Boston, Massachusetts

Funding available for five years.

Available immediately to study membrane/cellular signalling in mast cells in order to design selective inhibitors of mast cell secretion.

Applicants must have a Ph.D. with expertise in:

molecular cloning, DNA sequencing and library screening, PCR analysis, and *in situ* hybridization.

Familiarity with the following would also be helpful:

protein isolation, purification and characterization, single and two-dimensional electrophoresis, affinity chromatography.

Interested applicants are encouraged to send curriculum vitae and names of 3 references to: **T. C. Theoharides, Ph.D., M.D., Department of Pharmacology and Experimental Therapeutics, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111; Telephone: (617) 956-6866, FAX: (617) 956-6456.**

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

**ASSOCIATE RESEARCH SCIENTIST** position available immediately to join an active research group studying the molecular mechanisms of radiation/carcinogenesis and mutagenesis. Ph.D./M.D. in molecular genetics, cell biology or related fields with experience in molecular biology are encouraged to apply. Send curriculum vitae, names and addresses of three references, and recent reprints to: **Dr. Tom K. Hei, Center for Radiological Research, Columbia University, 630 West 168th Street, New York, NY 10032. Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### RESEARCH ASSISTANT

Research assistant position is available in the Department of Surgery Research at the University of Virginia Health Sciences Center. Research areas include vascular physiology, thoracic transplantation, and cardiovascular clinical studies. M.S. degree or higher and expertise in computer application and statistics is required. Send curriculum vitae to: **Irving L. Kron, M.D., Department of Surgery, Box 181, University of Virginia Health Sciences Center, Charlottesville, VA 22908. Affirmative Action/Equal Opportunity Employer.**

### BIOLOGIST, QUALITY ASSURANCE TAXONOMIC SPECIALIST

The U.S. Geological Survey in Arvada, Colorado, seeks a quality assurance taxonomic specialist to serve as a manager of the Biological Quality Assurance and Quality Control Unit of the National Water Quality Laboratory. The following knowledges, abilities, and skills are required for this position: (1) knowledge of taxonomy, specifically benthic macroinvertebrates identification with a working knowledge of algae, aquatic macrophytes and fish; (2) skill in supervision; (3) ability to work with a contractor to effectively translate scientific requirements for the identification and enumeration of aquatic biota; (4) knowledge of statistics and QA/QC in order to design QA/QC procedures to monitor contractor performance; (5) knowledge of museum-standard techniques for the long-term preservation, storage, and retrieval of biological specimens; (6) knowledge of computerized data storage and retrieval methods on either personal computers or UNIX systems. Candidates should have a M.S. or Ph.D. in biological or ecological sciences; or education and/or experience related to the above KASOCs. This is a career civil service position with an annual salary range of \$47,920 to \$62,293 depending on qualifications. Please mail by March 19, 1993, a completed application for Federal Employment (including college transcripts), statement of professional interests, and 3 letters of reference to: **Deborah Douglas, U.S. Geological Survey, PO Box 25045, MS 212, Denver, CO 80225.**

Standard Form 171 (application) and OPM Form 1170 (for transcripts) are available from the address above or any federal personnel office.

*U.S. citizenship is required. U.S. Geological Survey is an Equal Opportunity/Affirmative Action Employer.*

**MATERIALS ENGINEER:** Review plans for new product and factors for material selection within design objectives. Plan, implement lab work for new materials under cost and performance standards. Confer with producers of materials and manufacturers. Review data, interpret tests, determine causes. Ph.D. in materials science and two years of experience in job or as process or development engineer, and familiarity with ADV GaAs, related HBT, MESFET, HEMT and device/IC technology required. Salary \$5,000 per month, 40 hours per week. Location and interview: Los Angeles, California. Send ad and résumé to: **Job #JB18100, P.O. Box 269065, Sacramento, CA 95826-9065 no later than March 15, 1993.**

**SENIOR SCIENTIST/SCIENTIST, IMMUNOLOGY, AUTOIMMUNITY, TRANSPLANTATION IMMUNOLOGY.** The Senior Scientist/Scientist, Immunology will assist in the design and execution of a scientific-based program in collaboration with others to explore and assess humoral and cell-mediated response to biomaterials, and especially collagen-based biomaterials. A Ph.D. in immunology, 2 years of postdoctoral training in immunology, and 2 to 3 years of independent research experience, in addition to the postdoctoral years in the area of immunology of collagen and/or extracellular matrix required. A solid track record in the area of immunology, autoimmunity, and collagen-based biomaterials, as well as successful experience using tissue culture techniques and experience with understanding of *in vitro* bioassays, cytokine production, and *in vivo* animal models is necessary. A clear understanding of immunology of collagen and experience in autoimmunity along with knowledge and understanding of clinical disease process is needed. Successful experience with teamwork and a good publication and presentation record is very helpful. Please send résumé to: **Sherrie Wilkins, Ph.D., 1900 Embarcadero Road, Suite 205, Palo Alto, CA 94303.**



# PRINCIPAL RESEARCH SCIENTIST

## CELL & MOLECULAR BIOLOGY

CYTOGEN Corporation is an established biopharmaceutical company with a strong commitment to R&D. We've developed key patented systems that optimize the use of monoclonal antibodies as delivery systems for cancer diagnosis, imaging and radiotherapy. Now, having recently received FDA approval for our principal product, there has never been a better, more exciting time to join the CYTOGEN organization.

This is a supervisory position in the Discovery Research Laboratory involving the identification and characterization of monoclonal antibodies and novel cancer-targeting molecules. A background in Cell Biology and Molecular Biology with an emphasis on monoclonal antibodies or other receptor-binding proteins is desired. We prefer candidates with experience in characterizing binding, internalization, pharmacokinetics, biological effects, both in culture and in animal models. Experience with basic Molecular Biology techniques, such as cloning, expression in prokaryotes, sequencing, and library screening is highly desirable. A demonstrated ability to think creatively and critically, excellent oral and written skills, and supervisory experience are required.

CYTOGEN offers excellent salaries and a comprehensive benefits package. For consideration, please send 2 copies of your resume to: **Employment Manager, CYTOGEN Corporation, 600 College Road East, CN5308, Princeton, NJ 08540-5308.** An equal opportunity employer m/f.

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**University of Alberta  
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## Graduate Studies in Physiology

The Department of Physiology at the University of Alberta offers graduate programs leading to the degrees of M.Sc., Ph.D., and M.D.-Ph.D., as well as opportunities for postdoctoral training.

The University of Alberta is a major urban university located in Edmonton, a modern cosmopolitan city of 600,000 people. The environment offers varied cultural activities and easy access to the Canadian Rockies with some of the finest summer and winter recreational opportunities in the world.

Typical stipends are \$12,500 to \$14,500 for graduate and \$22,000 to \$35,000 for postdoctoral training. Some external awards include a research and travel allowance of \$1,000 per year for graduate and \$2,000 for postdoctoral training. Modern facilities are available for research in a number of areas and with a number of faculty.

A wide range of research interests is represented including: cellular and molecular endocrinology, cellular physiology, transport physiology, perinatal physiology, neurophysiology and biophysics.

Interested candidates are invited to apply to:

**Graduate Program Director, Department of Physiology  
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.*

# DEAN

**COLLEGE OF NATURAL &  
AGRICULTURAL SCIENCES**

**University of California, Riverside**

The University of California, Riverside, invites applications and nominations for the position of Dean of the College of Natural and Agricultural Sciences. The faculty of the College have the threefold responsibilities of the Land-Grant mandate in teaching, public service and direction of basic and applied as well as mission-oriented research in all aspects of the natural sciences and agriculture. Currently, the College has an enrollment of approximately 2,170 undergraduates and 555 graduate students in 20 undergraduate and 19 graduate programs in the following academic departments and research units: Biochemistry, Biomedical Sciences, Biology, Botany and Plant Sciences, Chemistry, Dry Lands Research Institute, Earth Sciences, Entomology, Environmental Toxicology, Institute of Geophysics and Planetary Physics, Mathematics, Nematology, Neuroscience, Physics, Plant Pathology, Soil and Environmental Sciences, and Statistics. On academic matters the Dean reports through the Executive Vice Chancellor to the Chancellor. The Dean also is responsible for the campus-based, mission-oriented programs of the statewide Division of Agriculture and Natural Resources, including research programs of the Agriculture Experiment Station and public service programs for Cooperative Extension.

The College and the Agriculture Experiment Station hold 630,973 assignable square feet of space and 1,390 acres of agricultural research land; and in addition administers seven off-campus holdings of the UC Natural Reserve System, comprising 28,159 acres. The College and the Agriculture Experiment Station have approximately 240 ladder-rank FTE, 30 Cooperative Extension and other academic FTE, and 476 non-academic staff FTE. The total College budget is over \$35 million. Approximately one-half of the College budget is allocated to the support of faculty and programs in the Agriculture Experiment Station and Cooperative Extension.

The Chancellor and faculty seek candidates with commitment to academic excellence to lead the college. Applicants must have a distinguished record of research, teaching and public service appropriate to an academic appointment at the level of full professor in the College department of the candidate's discipline as well as a record of successful leadership and creative management. Salary will be commensurate with experience and qualifications. The target date for starting the position is July 1, 1993.

Consideration of nominations and applications will begin March 1, 1993. Applications will be reviewed every two weeks thereafter until suitable candidates are identified. Nominations and letters of application, including a resume and the names and addresses of five references, should be sent to: **Professor Dallas Rabenstein, Chair, Search Committee for the Dean of the College of Natural and Agricultural Sciences, Office of the Chancellor, University of California, Riverside, CA 92521.**

The University of California, Riverside, a comprehensive Land-Grant research campus located in Southern California, is the most rapidly growing campus of the University of California. In the fall of 1992, approximately 8,800 students are enrolled in three colleges (Natural and Agricultural Sciences, Humanities and Social Sciences, and Engineering) and two professional schools (Education and the Graduate School of Management). The campus is surrounded by a supportive and rapidly growing external citizenry, including the municipality of Riverside and a number of communities in an area known as the Inland Empire of California. UCR is an equal opportunity/affirmative action employer.





# POSTDOCTORAL RESEARCH FELLOWS

Innovative research at Sandoz has been enhancing medicine around the world for over a century. Pioneering drugs have extended and improved the quality of life for countless individuals and revolutionized basic scientific concepts within the transplantation and mental health fields. Opportunities now exist for Postdoctoral Fellows within our Drug Safety Department, which is located in a new, state-of-the-art research facility. Postdoctoral appointments are for one year and are renewable for a second year by mutual agreement. Sandoz Postdoctoral Fellows receive a generous salary and are eligible for a full range of benefits.

## MOLECULAR BIOLOGIST OR BIOCHEMIST TO STUDY DRUG METABOLISM

Postdoctoral Fellow to conduct basic research on the fate of drugs and on the effect of drugs on the body's ability to eliminate drugs. This research will focus on the uses of molecular biology approaches to study drug metabolism. A Ph.D. in a biological or biochemical discipline with a strong knowledge of molecular biology techniques, including PCR, is required, and a background in mammalian cell lines, enzymology and protein purification is desirable. **(Position #385).**

## MASS SPECTROMETRIST FOR BIOANALYTICAL CHEMISTRY

Postdoctoral Fellow to apply quantitative bioanalytical mass spectrometry in an industrial environment. A Ph.D. with mass spectrometry hardware and software skills is required to use/implement modern liquid interfaces (thermospray and electrospray) and gas interfaces (splitless/on-column capillary GC) in a variety of ionization (TSP, ESP/APCI, EI, CI) and mass filter modes (MS and MS/MS) toward solving bioanalytical problems for trace and ultra-trace quantitative analysis. The incumbent will operate within a network of three mass spectrometers using the RSX, UNIX and MS-DOS operating systems with magnetic as well as optical data storage devices with the aim of automating data reduction and report generation to maximize productivity **(Position #384).**

For consideration, please specify the number of the position you are responding to and forward your curriculum vitae and the names and

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# BIOMOLECULAR RESEARCH SCIENTIST I

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Requirements include a Ph.D. in Biochemistry or related field or equivalent, with 1 to 3 years of postdoctoral experience in research related to enzymes of signal transduction, such as protein kinase C and/or phospholipases.

Sphinx offers competitive salaries and excellent benefits in a high-energy environment, where personal initiative and contributions are recognized and rewarded. In addition, our location in the Research Triangle Park area of North Carolina offers a superb quality of life with all the cultural, recreational, and educational amenities that one could ask for. Please forward your resume, including salary history and names of three references, to: **Human Resources, SPHINX PHARMACEUTICALS CORPORATION, Position #224, P.O. Box 52330, Durham, NC 27717.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer.



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## UPPSALA UNIVERSITET

**Applications are invited for the  
CHAIRS OF  
BIOCHEMISTRY, especially protein chemistry  
(Ref nr 453/93)**

Applications should be made to the "Vice-Chancellor's Office" and be mailed so as to arrive at **Uppsala University, Box 256, S-751 05, Uppsala Sweden, no later than April 15, 1993.** The position will be vacant from July 1, 1994. For further information, please contact Professor Paul Roos, tel +46(0)18 17 43 20, Department of Biochemistry, Box 576, S-751 23 Uppsala, Sweden. Telefax +46(0)18 55 21 39.

**BIOCHEMISTRY, especially separation science  
(Ref nr 454/93)**

Applications should be made to "The Government" and be mailed so as to arrive at Uppsala University, Box 256, S-751 05 Uppsala, Sweden, *no later than April 15, 1993.* The position will be vacant from July 1, 1995. For further information, please contact Professor Stellan Hjertén, tel +46(0)18 17 44 61. Department of Biochemistry, Box 576, S-751 23 Uppsala, Sweden. Telefax +46(0)18 55 21 39.

The applicant is required to submit, in four copies, a *curriculum vitae*, including a short account of his/her scientific and teaching experience and a list of scientific publications, as well as copies of degrees obtained and any other documents of relevance, all to be signed and duly witnessed. It should be clear from the written account which scientific results and other merits are most highly rated by the applicant and which should be given special weight by the appointments board.

The applicant should also indicate and forward in four copies, those ten publications which he/she considers most adequately represent his/her scientific achievements. Other publications taken up in the list of publications are to be provided in one copy.

Emoluments are in accordance with the scale for university departmental heads (chefs-löneavtalet), currently ranging from 250 000 SEK to 400 000 SEK. The point of entry will be decided by the appropriate authority and depends on experience.



## MICROBIAL GENETICS

The National Renewable Energy Laboratory (NREL) in Golden, Colorado, just west of Denver, is the nation's primary federal laboratory for research and development of solar and renewable energy technologies.

The Applied Biological Sciences Branch of the National Renewable Energy Laboratory (NREL), in Golden, Colorado has several key openings for BS/MS level researchers skilled in classical and modern genetic techniques. You will be joining a new, dynamic team of scientists working to metabolically engineer a variety of fermentative microorganisms to overproduce liquid fuels (ethanol in particular) and other value added chemicals. A strong background in microbiology, biochemistry, and molecular biology along with at least two years of relevant, "hands-on" laboratory experience is required of the successful candidates. Familiarity with DNA isolation and purification, restriction analysis, plasmid construction, heterologous gene expression, mutagenesis (classical and site-directed), and protein analysis would be useful attributes.

NREL, formerly Solar Energy Research Institute (SERI), has been appointed national laboratory status and is entering a new era of energy research. This new elevated role has created an unparalleled environment of support for our work and our people. Our innovative research for cleaner, safer, and renewable energy sources is carried out in state-of-the-art laboratories.

We offer an excellent compensation and benefits package. For immediate consideration, please send resume to: Human Resources Office, E4220-1075, NREL, 1617 Cole Boulevard, Golden, CO 80401.

For information regarding current job opportunities at NREL,

contact JOB LINE (303) 628-4650

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## EXECUTIVE OFFICER

### THE AMERICAN SOCIETY FOR CLINICAL NUTRITION, INC

The American Society for Clinical Nutrition invites applications for the position of Executive Officer. The Society is a professional membership organization that constitutes the Clinical Division of the American Institute of Nutrition. The Society's headquarters are located at the Federation of American Societies for Experimental Biology campus in Bethesda, Maryland. The Society is separately incorporated and manages its own administrative and financial affairs and publishes its journal, *The American Journal of Clinical Nutrition*, which has an international circulation.

The Executive Officer has administrative and financial responsibility for the Society; works with the Council, which is the governing body of the Society, to set policy and program priorities; provides strong and effective advocacy for clinical nutrition and related research priorities of the Society with the Congress, Federal Agencies (i.e., DHHS, USDA, EPA), with elected officials and the public; develops liaisons with other professional societies; provides support to the membership; is responsible for the management of the Annual Meeting, Postgraduate Course, and other meetings; and oversees the production of Society publications.

The ideal candidate will have strong communication skills and a substantial professional background in a health or science field, significant experience in scientific and government relations, demonstrated success in building liaisons and coalitions, and developing innovative approaches to public relations efforts.

Additional information will be provided on request. Candidates for this position must submit a curriculum vitae and a covering letter outlining qualifications and evidence of activities participated in that may be related to this position. Materials must be received no later than May 31, 1993 and sent to:

**Chair, Search Committee for Executive Officer of  
The American Society for Clinical Nutrition  
c/o FASEB Office of Human Resources  
9650 Rockville Pike  
Bethesda, Maryland 20814-3998**

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

## POSTDOCTORAL SCIENTISTS STRUCTURE BASED DRUG DESIGN

Agouron Pharmaceuticals, Inc., a recognized leader in structure-based drug design, is seeking to fill several postdoctoral positions with scientists interested in research on protein-ligand interactions. Candidates should be trained in one of the three areas described below and be willing to work as part of an interdisciplinary team exploring new methods for quantitating the energetics of protein-small molecule association.

**Macromolecular crystallography** — Applicants should be familiar with techniques of protein crystallization, x-ray diffraction data collection, interpretation of electron density maps, and macromolecular crystallographic refinement. Code DM1.

**Thermodynamics of protein-ligand interactions** — Candidates should have experience with protein purification and the use of microcalorimetry to characterize the thermodynamics of protein-protein or protein-ligand association. Code DM2.

**Computational chemistry** — A background in the development of computer programs for modeling biomolecular systems is required. Expertise in some of the following areas is essential: molecular recognition, statistical mechanics, development of potential functions, molecular dynamics or MonteCarlo simulations. Code DM3.

We offer a competitive compensation and benefits package in addition to an intellectually stimulating environment in a superb location. Please send a detailed résumé including position code to:

Human Resources



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TO BE CONSIDERED FOR THIS POSITION SUBMIT A CV, A PHOTO AND A HAND-WRITTEN LETTER TO MÉDIA-SYSTEM, 6 IMPASSE DES DEUX COUSINS, 75849 PARIS CEDEX 17, FRANCE, QUOTING REF. 40345 ON THE ENVELOPE.



## POSITIONS OPEN

### PLANT ECOPHYSIOLOGIST

Boyce Thompson Institute for Plant Research is seeking a **PLANT ECOPHYSIOLOGIST** for a non-tenure-track **RESEARCH SCIENTIST** position at the assistant, associate, or full level. The incumbent will be a member of the Environmental Biology Program, a major interdisciplinary team studying the effects of environmental stresses on plants and plant systems. A funded study of carbon dynamics in forest tree species as affected by ozone will provide partial support initially. The successful candidate will be expected to establish or transfer her/his own independent, but related, research project.

Boyce Thompson Institute is a private, not-for-profit research institute affiliated with and located on the campus of Cornell University in Ithaca, New York.

Qualifications: A Ph.D. in the plant sciences is required. Postdoctoral experience is desirable. Salary and start-up package are negotiable and commensurate with experience.

The position is available 1 July 1993. Screening of applications will begin by 31 March 1993, but the search will continue until the position is filled. Applicants should send curriculum vitae, statement of research goals, and three letters of reference to: **J. A. Laurence, Program Director, Environmental Biology Program, Boyce Thompson Institute for Plant Research, Tower Road, Ithaca, NY 14853-1801.**

Boyce Thompson Institute for Plant Research is an *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### STAFF SCIENTIST

The Oversight Office in the Office of Inspector General, National Science Foundation (NSF), is seeking qualified applicants for two Staff Scientist positions at the GS/11 through 15 or comparable excepted service, AD II through IV level (salary range \$33,623 to \$88,255). Staff Scientists are primarily responsible for investigating allegations of misconduct in science and engineering. Qualified applicants should possess a Ph.D. or equivalent professional experience in Engineering or Social, Biological, Physical, Mathematical, or Computer Science as well as research experience in a particular field and a broad understanding of the practice of scientific and engineering research across disciplines. The position requires the ability to write effective analytical and technical reports and to speak effectively.

Contact: **Rhonda Horton at (202) 357-9529** for a copy of the appropriate vacancy announcement, which includes instructions on how to apply. *As a federal agency, NSF is an Equal Opportunity Employer. Women, minorities, and persons with disabilities are encouraged to apply.* All applications and supporting documents must be received by March 16, 1993.

## MEETINGS

### CATALYTIC ANTIBODIES AND ANTIBODY ENGINEERING

Satellite Meeting, sponsored by the Russian Academy of Sciences, University of Nebraska Medical Center and IGEN Inc., in conjunction with the International Conference on Biocatalysis, Moscow, Russia, June 6-11, 1993.

Topics covered by this Symposium include: Catalytic antibodies to transition state analogs, charged analogs and antigen ground states; naturally occurring catalytic antibodies; potential therapeutic uses and pathogenic role of catalytic antibodies; mechanistic analysis and comparison of catalysis by antibodies and enzymes; structure of antibody genes and antigen-antibody complexes; selection of antibodies from phage display libraries; production of hybrid antibodies and CDR grafting. The meeting will be held during a scenic 6-day boat cruise on the Volga River.

Abstract deadline April 1, 1993; For further information contact: **Dr. Sudhir Paul, FAX: (402) 559-5592; University of Nebraska Medical Center, Department of Anesthesiology, 600 South 42nd Street, Omaha, NE 68198-4455.**

## MEETINGS

### BIODEGRADATION: ITS ROLE IN REDUCING TOXICITY AND EXPOSURE TO ENVIRONMENTAL CONTAMINANTS

will be held **April 26-28, 1993**, at the National Institute of Environmental Health Sciences in Research Triangle Park, North Carolina, USA. This conference brings together a diverse group of scientists in a multidisciplinary framework to examine the current state of knowledge, the research needs in biodegradation and treatment, and the role of these processes in reducing the toxicity and exposure to environmental contaminants. For further information contact: **Lily Young, AgBiotech Center, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903, USA. (FAX: 908-932-6535).**

## ANNOUNCEMENTS

### M. J. BRODY FELLOWSHIP IN BASIC CARDIOVASCULAR RESEARCH

This fellowship provides \$7,500 per year to enhance existing base support of fellows in basic cardiovascular pharmacology and physiology. The intent is to bring highly promising investigators from the United States and abroad to the University of Iowa for additional research training. Eligible individuals must be in the developmental stage of their career and have attained a doctoral degree. A proposal is required, details about which can be obtained from the address below.

Proposals will be accepted at any time, but should be received before April 1, 1993, for starting on or after July 1, 1993. *The University of Iowa is an Affirmative Action/Equal Opportunity Employer.*

**G. F. Gebhart, 2-372 Bowen Science Building, Department of Pharmacology, The University of Iowa College of Medicine, Iowa City, IA 52242-1109.**

### Utah Genome Technology Workshop HUMAN GENE MAPPING & SEQUENCING June 13-26, 1993

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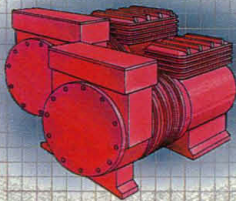
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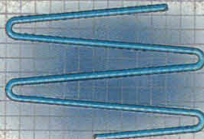
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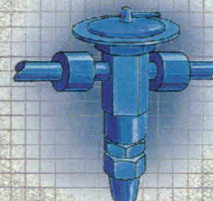
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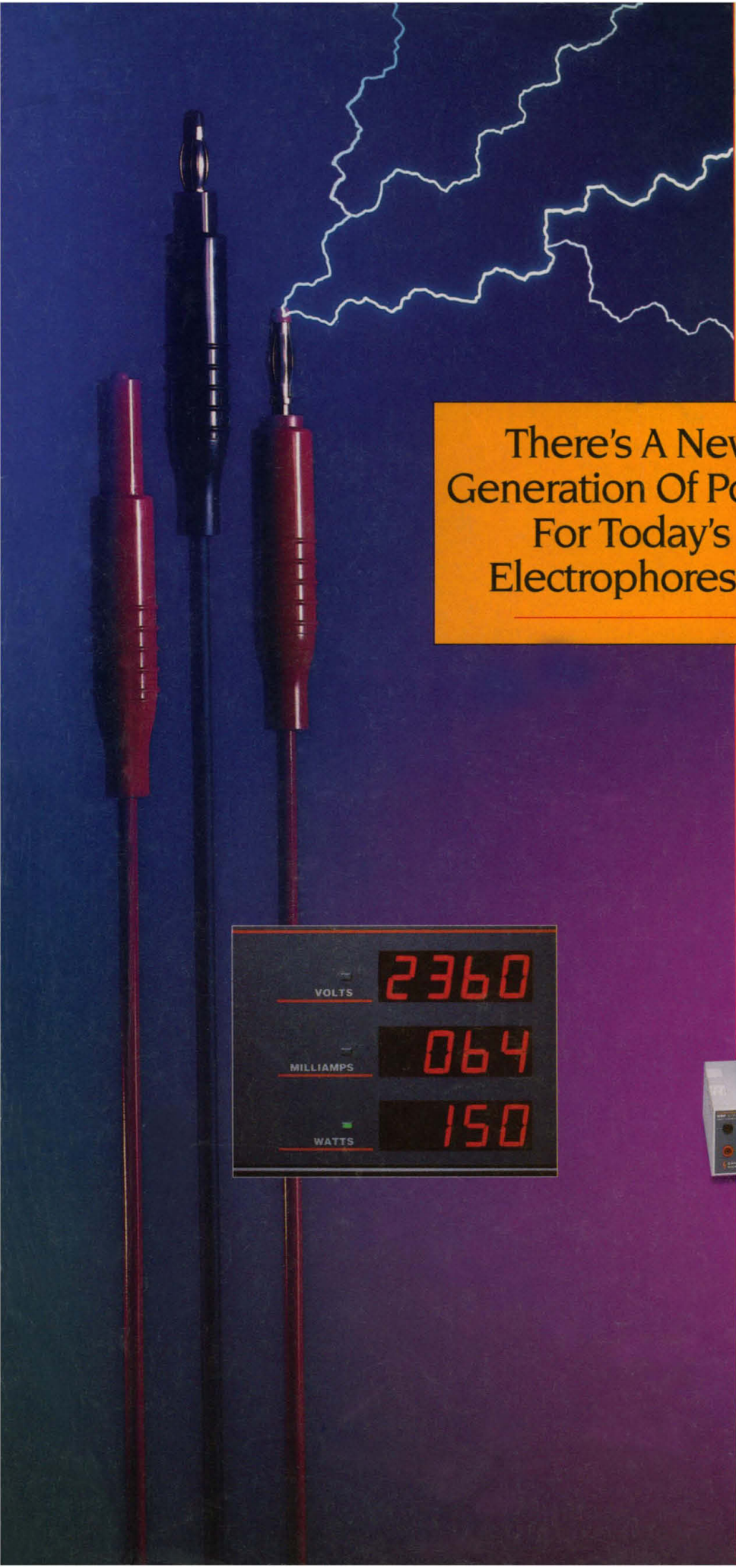
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