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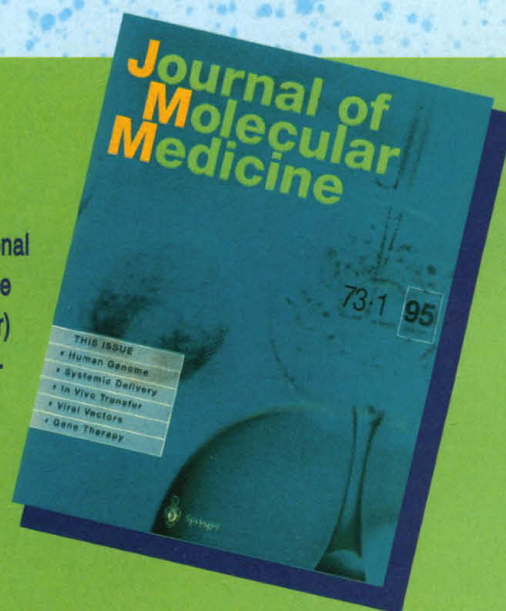


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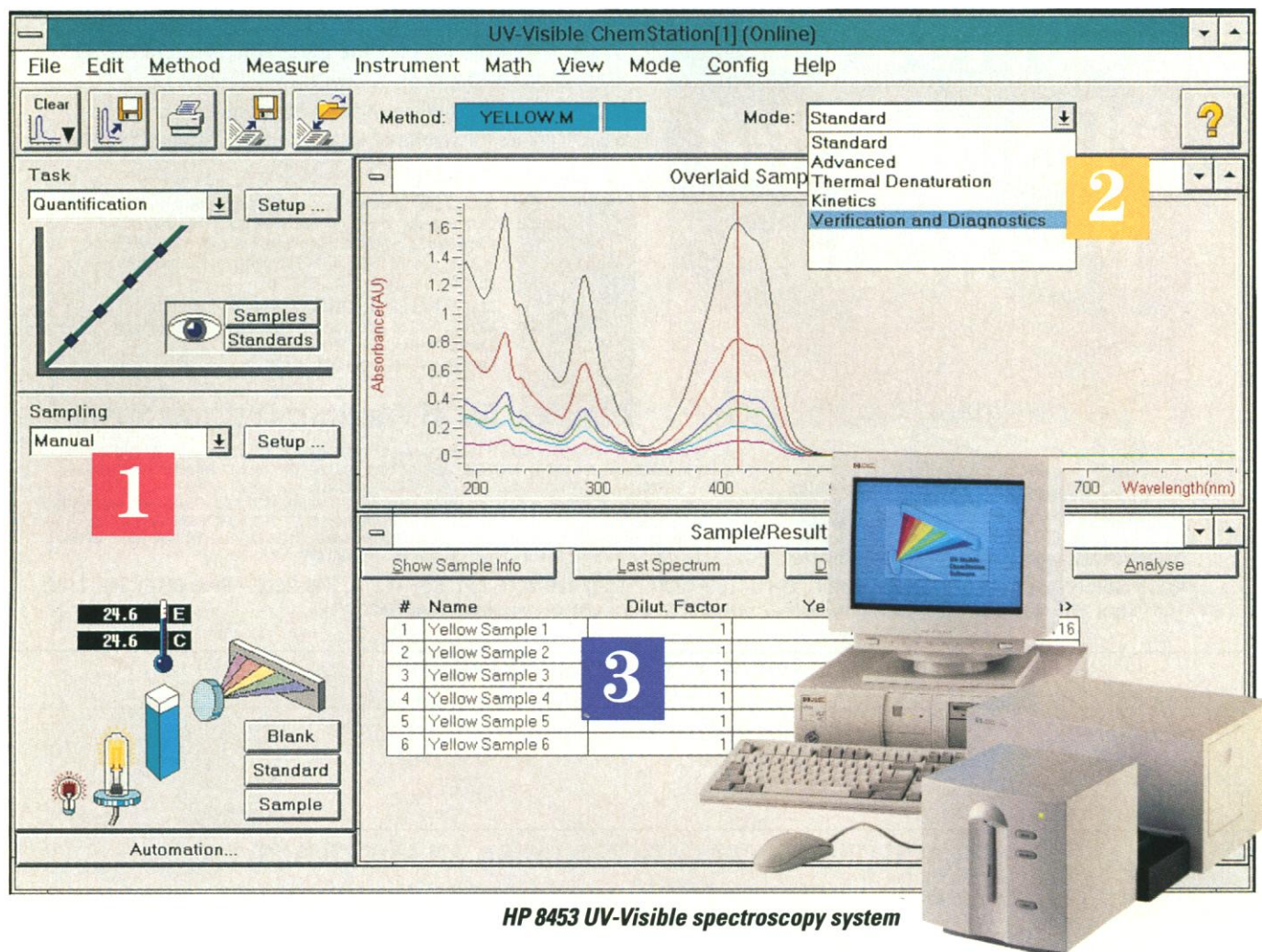
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# Using our new UV-Vis system is easy as one, two, three.



## 1 Easy to use.

HP introduces UV-Visible spectroscopy that's visibly easier to use: The new HP 8453 system – with next-generation diode-array technology – provides a highly interactive graphical user interface. This unique feature offers unsurpassed ease of use for operators at all skill levels. It gives them immediate visual feedback on actions and status, which minimizes errors and makes the system easy to learn and easy to use. If needed, the user can instantly access an online help system for tutorial assistance and "how-to" instructions.

## 2 Easy GLP compliance.

The new UV-Visible system comes with a comprehensive suite of GLP compliance tools. HP's proven software tools simplify operator procedures, and help you achieve compliance quickly and reliably. New hardware features supporting GLP include instrument serial number in firmware – for positive identification – and an electronic logbook to track instrument performance, verification and maintenance. Improved optical performance further helps ensure compliance with worldwide pharmacopoeia requirements.



## 3 Easy productivity gains.

The new HP 8453 may be the most productive UV-Visible system you've ever used. It organizes common functions as tasks that can be quickly executed, using a single dialog box. And it combines fast scanning, an open sample area and highly reliable diode-array technology to further enhance productivity. You can also maximize uptime with reliable HP systems, backed by our top-rated service and support teams worldwide. For further information, call 1-800-227-9770, Ext. 1161.







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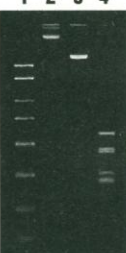
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- Purifies 2-10 micrograms of plasmid from 1 ml of overnight culture in 30 minutes.
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pUC 18 DNA prepared from 1 ml of overnight JM109 bacterial culture, grown in LB broth and digested with restriction endonucleases as indicated. Electrophoresis was in 2% AMRESCO Agarose I (code 0710) in 1X TBE buffer and stained with ethidium bromide.

**Lane 1:** AMRESCO PCR DNA Marker™ (code E845).

**Lane 2:** 1/10 of yield from 1 ml overnight culture (uncut).

**Lane 3:** 1/10 yield, cut with Eco R1.

**Lane 4:** 1/10 yield, cut with Hae III.

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## TEACH HEALTH EDUCATION TO AFRICAN AMERICANS

The American Association for the Advancement of Science (AAAS)

*invites you to join*

### The AAAS Black Church Health Connection Project

This nationwide volunteer initiative funded by the National Institutes of Health, pairs scientists with churches to help educate African American children and adults about fundamental biology and health concepts. The Project is seeking scientists, especially those with expertise in the biomedical/behavioral science fields, to:

- volunteer 25 hours per year to implement hands-on education activities in churches serving the African American community
- participate in a 1 1/2 day workshop training session
- attend a feedback session following workshop training

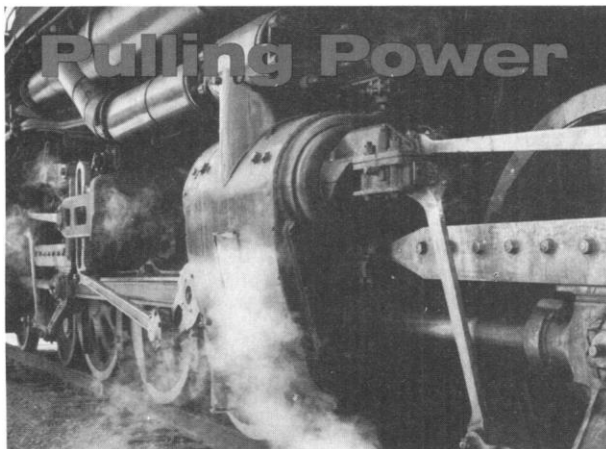
Training materials, a video, and career information will be provided.

Scientists throughout the U.S. are encouraged to participate, especially those located in or near:

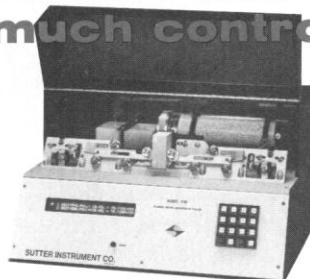
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To apply, send your CV or resume to: AAAS, Directorate for Education and Human Resources, 1333 H St. NW, Washington, DC 20005

For more information, contact LaJoy Mosby at 202-326-6670, or send an E-mail message to [lmosby@aaas.org](mailto:lmosby@aaas.org)



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## Pharmacia Biotech & SCIENCE Prize for Young Scientists

IN MOLECULAR BIOLOGY 1995

Pharmacia Biotech and SCIENCE are joining forces to encourage scientists at the start of their careers with an award for graduate work in molecular biology. This major new world-wide prize will include US\$20,000 awarded to the best young scientist of the year, and up to 7 additional prizes of US\$5,000 each. Prizes will be presented in Stockholm, Sweden, during December 1995. The winning essay will be published in Science.

Full details can be requested from the administrator, at the address below, or via Internet to: [science\\_editors@aaas.org](mailto:science_editors@aaas.org)

The Award Committee

Pharmacia Biotech & SCIENCE Prize for Young Scientists  
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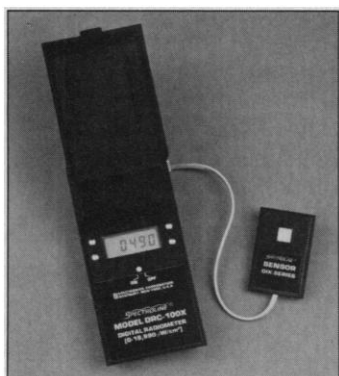
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## Versatile Digital Radiometer

The Spectroline DRC-100X digital radiometer answers the needs of biotech researchers who want one meter to monitor ultraviolet and blue light radiation in four different spectral ranges with speed, accuracy, and reliability. Whether the need is gel electrophoresis, chromatography, phototherapy, germicidal applications,



mutation studies, or a host of other applications, the DRC-100X provides measurements for the complete ultraviolet range plus blue light with an overall accuracy of  $\pm 5\%$ . This versatility is possible because the digital readout unit can be used with five different interchangeable sensors. Spectronics. Circle 139.

## Long Template PCR System

The Expand Long Template PCR System is for amplifying large DNA fragments. Three polymerase chain reaction (PCR) buffers, each optimized for amplifying fragments within a certain range, allow amplification of up to 27-kb human genomic fragments. Boehringer Mannheim. Circle 140.

## Intensifying Screens

Intensifying screens can substantially improve radiographic images. The screens emit photons of light when excited by beta particles or gamma rays. These emis-

sions are then recorded on the radiographic film much more readily than when the intensifying screens are not used. The screens can increase sensitivity up to 10 times for  $^{32}\text{P}$  and 15 times for  $^{125}\text{I}$ , according to the manufacturer. Midwest Scientific. Circle 141.

## Cy3-Labeled Reagents

Secondary antibodies and avidin antibodies conjugated to Cy3 are available for use in immunohistochemistry and immunocytochemistry. The labeled antibodies are goat anti-human immunoglobulin G (IgG), goat anti-human IgM, rabbit anti-goat IgG, sheep anti-mouse IgG, and sheep anti-rabbit IgG. The avidin reagents are ExtrAvidin and Streptavidin. Sigma Immunochemicals. Circle 142.

## Oxygen Imaging System

With the OxyMap System, oxygen concentrations of regions up to 20 mm in diameter can be measured and visually displayed with resolution of 40  $\mu\text{m}$  per pixel. OxyMap makes use of a patented process to measure the quenching of phosphorescence by free oxygen of nontoxic probe molecules. Phosphorescent lifetimes as short as 15  $\mu\text{s}$  are measured and data for a complete map is gathered in approximately 8 s. OxyMap generates high spatial resolution images of oxygen concentrations from saturation levels down to less than 0.01 torr. The process is quantitative and noninvasive. It can be used to study oxygen delivery to tissue, metabolism of tissue, animal models of stroke and cardiovascular trauma, wound healing, hypoxic trauma, and more. Medical Systems. Circle 143.

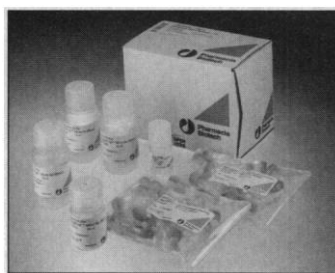
Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement 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.

## Chemical Inventory Software

Chemical Inventory System Version 2 for Microsoft Windows is designed for tracking chemicals and other supplies in the laboratory. The program keeps track of chemical names, CAS numbers, formulas, vendor and catalog numbers, storage locations, and quantities. It can print bar codes for labeling containers. Simple listings or detailed reports can be generated for any chemical, supply, or group of items. Reports can estimate quantities and costs for a specified period based on historical usage data. WindowChem Software. Circle 144.

## Genomic DNA Isolation Kits for Blood

The RapidPrep Genomic DNA Isolation kits for blood combine a procedure for isolating nuclear DNA with an anion-exchange resin and spin chromatography to provide genomic DNA quickly. The Micro Kit is designed for polymerase chain reaction (PCR),



and contains reagents sufficient for 50 purifications from 10 to 500  $\mu\text{l}$  of whole blood or  $1 \times 10^6$  to  $4 \times 10^6$  lymphocytes. The Macro Kit contains sufficient reagents for 10 purifications from 1 to 5 ml of whole blood or  $5 \times 10^6$  to  $2 \times 10^7$  lymphocytes yielding genomic DNA of sufficient yield and purity for such subsequent applications as PCR, restriction fragment length polymorphism

analysis, restriction analysis, and other molecular manipulations. Pharmacia Biotech. Circle 145.

## Tissue Embedding Media

Ribbon Pro Tissue Embedding Media is a highly refined mixture of paraffins and co-polymer alloys in a convenient wax pellet form. This unique formulation provides optimal tissue support while providing exceptional clarity. It reduces compression and cell disruption to a minimum and routinely cuts at 2  $\mu\text{m}$  without icing. It performs well in pressure-vacuum fluid flow processors. Its low melting point eliminates tissue distortion caused by excessive heat during processing. Curtin Matheson Scientific. Circle 146.

## Literature

*In Vivo pH Measurement of Tissues by Fluorescence Spectroscopy* is an application note that describes the instrument setup and measurement principle of this procedure. Jobin Yvon/SPEX. Circle 147.

*Cardinal Automatic Colony Counting System* is a color information sheet on an instrument developed for the accurate analysis of bacterial or mammalian cultures across a wide range of growth media. Perceptive Instruments. Circle 148.

*Laboratory Safety Guidelines: 40 Steps to a Safer Lab* offers an in-depth discussion of each of the safety suggestions, including examples and ideas for implementation. James A. Kaufman and Associates. Circle 149.

*Biotechnology Laboratory Equipment* is a catalog featuring gel electrophoresis equipment, power sources, gel staining and visualization tools, waterbaths, incubators, microcentrifuges, accessories, and more. Edvotek. Circle 150.



# Science

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### LINE CLASSIFIED ADVERTISEMENTS

**Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Ads must be submitted in writing.

#### How to Submit a Classified Ad:

Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training, Search Firms. *Science* cannot provide proofs of typeset line ads.

#### Mail, FAX or Email materials to:

Science Classified Advertising  
1333 H Street, N.W., Room 814  
Washington, DC 20005  
Telephone: 202-326-6555  
FAX: 202-682-0816

Internet Email: science\_classifieds@aaas.org

**Rates:** Ads are \$43 per line; \$430 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads.

**Estimates:** *Science* will provide a cost estimate for line ads. This is an approximate cost only. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.

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**Credit Cards:** *Science* accepts American Express, MasterCard and VISA. Discount does not apply to credit cards.

**Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

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**CONDITIONS:** The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

## POSITIONS OPEN

### SENIOR FACULTY POSITIONS

Structure and Function of Macromolecules  
University of Oklahoma Health Sciences Center  
Department of Biochemistry and Molecular Biology

Under the leadership of the new Chairman, **Dr. Paul H. Weigel**, the Department of Biochemistry and Molecular Biology at the University of Oklahoma Health Sciences Center plans a significant expansion in the size and research activities of the Department. The search committee invites applications from established investigators with expertise in structure and function of macromolecules for several positions at the **ASSOCIATE** or **FULL PROFESSOR** level. Interested candidates must have a Ph.D. or equivalent degree and a strong publication record in physical biochemistry with sustained extramural support. Examples of appropriate areas of research are protein folding, assembly, protein-protein, protein-nucleic acid, protein carbohydrate and protein-membrane interactions. Knowledge of physical biochemical techniques, such as fluorescence spectroscopy, microcalorimetry, circular dichroism and NMR spectroscopy would be an asset. Successful candidates are expected to lead independent research programs, to participate in graduate and professional teaching programs and to serve as a resource for other faculty and students. There are six colleges in the University of Oklahoma Health Sciences Center, located on a 200 acre modern campus in Oklahoma City, with over 3,300 students and 2,200 faculty. A Biotechnology Park is under construction and work will begin shortly on a \$45 million Biomedical Research Center. A letter of application, curriculum vitae, outline of current and future research activities, selected reprints and names of three references should be received by May 1, 1995, after which screening will begin with a possible starting date of September 1, 1995. Applications should be sent to: **John R. Sokatch, Chair, Search Committee, Department of Biochemistry and Molecular Biology, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR DEPARTMENT OF ZOOLOGY UNIVERSITY OF BRITISH COLUMBIA

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level in the Department of Zoology, University of British Columbia. Salary will be commensurate with education and experience.

The Department of Zoology currently comprises 36 faculty members, approximately 35 postdoctoral fellows and research associates, and 140 graduate students. Preference will be given to candidates with at least two years of postdoctoral experience and demonstrated excellence in research that complements the present strengths in the department. We require a comparative endocrinologist (vertebrate or invertebrate). Experience with molecular biology approaches to this discipline will be considered a major asset. The appointee will be expected to develop a strong research program, and teach in appropriate undergraduate courses. Starting date will be January 1 or July 1, 1997. Appointment is subject to final budgetary approval.

Curriculum vitae, three letters of reference, and a brief outline of research interests should be submitted to: **Dr. J. E. Phillips, Head, Department of Zoology, University of British Columbia, 2354-6270 University Boulevard, Vancouver, BC V6T 1Z4 Canada. FAX: 604-822-2416. Closing date for application is August 1, 1995.**

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities. Appointment may be considered at a higher rank for a senior woman with exceptional qualifications.*

Virginia Commonwealth University's Department of Pharmacology and Toxicology seeks a non-tenurable **ASSISTANT PROFESSOR**, with a Ph.D. or equivalent, doctoral training in behavioral sciences or pharmacology, and at least two years of postdoctoral experience in behavioral pharmacology. The applicant should have experience in drug discrimination studies in rats and monkeys. Send a curriculum vitae and names of three references, by May 8, 1995, to: **Dr. Robert Balster, Box 980310, Richmond, VA 23298-0310. Position description available. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.**

## POSITIONS OPEN

### ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGY

The College of Saint Benedict and Saint John's University are accepting applications for a tenure-track position at the rank of **ASSISTANT PROFESSOR** of Biology. Normal teaching duties include one upper division and one lower division course each semester. The position will begin August 1995. Requirements include a Ph.D. with broad training in the areas of biochemistry, molecular biology, and/or genetics; demonstrated interest and ability in teaching; a desire to participate in research with undergraduates. The joint Biology Department has 16 faculty members representing all major areas of biology and one professional staff person. The Colleges are two Catholic Benedictine liberal arts colleges located four miles apart in Central Minnesota. Saint Benedict's is a college for women and Saint John's a college for men. The students of these two colleges share in one common education, as well as coeducational social, cultural and spiritual programs. Saint Benedict's and Saint John's have a common core curriculum, identical major requirements and a common academic calendar. All academic departments are joint; one admissions office, a single registrar's office, a combined library system, academic computer services and a myriad of joint student activities and clubs. The Colleges enroll 3,500 students from 43 states and 20 foreign countries and trust territories. The combined faculty of approximately 260 include Benedictines and lay professors with diverse religious and cultural backgrounds. Send a letter of application, curriculum vitae, three letters of recommendation, graduate transcripts to: **Kathy Flynn, Human Resource Director, College of Saint Benedict, 37 South College Avenue, St. Joseph, MN 56374. Applications received after April 21, 1995, cannot be guaranteed consideration. Women and people of diverse racial, ethnic, and cultural backgrounds are especially encouraged to apply. The College of Saint Benedict/Saint John's University are Equal Employment Opportunity/Affirmative Action Employers.**

### ASSISTANT PROFESSOR DEPARTMENT OF ENTOMOLOGY UNIVERSITY OF MASSACHUSETTS/ AMHERST

Non-tenure-track **FACULTY POSITION** available fall 1995 to conduct research in basic and applied biology of insects of indoor environments. Candidate will develop vigorous, externally funded research program. Research focus could be in chemical ecology, molecular/population genetics, or other appropriate areas of study. Teaching includes instruction in and coordination of new undergraduate program in Urban and Public Health Pest Management. Qualifications include doctorate in Entomology or equivalent, interest in applied problems, and a strong commitment to teaching, research, and publication. Salary competitive and based on qualifications. Three year academic appointment, reappointment contingent upon availability of funding. Priority deadline is May 15, 1995, but search will remain open until a candidate is selected. Send curriculum vitae, up to five reprints, graduate transcripts, and names, addresses, and FAX numbers of at least three references to: **Dr. Anne L. Averill, Department of Entomology, Fernald Hall, University of Massachusetts, Amherst, MA 01003-2410. Telephone: 413-545-1054; FAX: 413-545-2115; Email: aaverill@ent.umass.edu. The University is an Affirmative Action/Equal Opportunity/Americans with Disabilities Act Employer.**

### ASSISTANT PROFESSOR Digital Cartography/ Geographic Information Science University of Maryland at College Park

The Department of Geography invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Applicants must have a Ph.D. in cartography or related area such as environmental/social/computer sciences, engineering. Successful candidate will be expected to establish an externally funded research program complementary to the rapidly expanding main research foci of the Department - biophysical dimensions of global change, human dimensions of global change, community landscape and place. Applicants submit a letter of application, résumé, name/address/telephone number of three references by April 15, 1995. Apply to: **Dr. Samuel Goward, Chair, Search Committee, Department of Geography, University of Maryland, College Park, MD 20742.**

*Women and minorities are encouraged to apply.*

## POSITIONS OPEN

### THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

Biology, Prokaryotic Molecular Biology/Molecular Genetics and Microbiology, **INSTRUCTOR/ASSISTANT PROFESSOR**, fall 1995, Tenure-Track. Ph.D. (Assistant Professor) or ABD (Instructor) required. Teaching includes General Biology, Microbiology, Genetics, Molecular Genetics and General Studies courses. Excellence in teaching and a research program involving undergraduates expected. Salary \$30,529 to \$38,799.

Marine Science, **INSTRUCTOR/ASSISTANT PROFESSOR**, fall 1995, half-time, one year, possibly renewable. Ph.D. (Assistant Professor) or ABD (Instructor) required. Ph.D. preferred. Teach Introductory Oceanography lectures and laboratories, and a course for non-science majors in the applicant's field of interest. Familiarity with coastal New Jersey and/or marine policy desired. Research encouraged. Salary \$15,264 to \$19,399 annually.

Stockton is a state-supported undergraduate liberal arts college located in the New Jersey Pine Barrens, one hour from Philadelphia.

Screening begins April 22, 1995. Salary may be higher depending on qualifications, experience and increases in the appropriately established compensation plan. Send letter of application, résumé, three letters of recommendation, and evidence of completion or expected date of completion of Ph.D. to: Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, The Richard Stockton College of New Jersey, AA29, Pomona, NJ 08240-0195. Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. R503679

### VISITING FACULTY POSITIONS UNIVERSITY OF MONTANA

The Division of Biological Sciences invites Ph.D. applicants for two teaching positions at the **ASSISTANT PROFESSOR** level. Both are one-year appointments renewable for two additional years contingent upon satisfactory performance. Current knowledge of electronic information technologies is desirable.

Biology Education. Teaching includes two introductory biology courses with laboratories each semester. Active participation in curriculum and science education reform also required.

Human Anatomy and Physiology. Teaching includes introductory courses in human anatomy and physiology, an upper-division course in principles of physiology and a medically related physiology course.

Send letter of application, curriculum vitae, statement of teaching philosophy, and three letters of reference to the **Biology Education or Anatomy and Physiology Search Committee**, Division of Biological Sciences, University of Montana, Missoula, MT 59812. FAX: 406-243-4184. Screening begins 15 April 1995 and continues until positions are filled. The University of Montana is an Affirmative Action/Equal Opportunity Employer.

**RESEARCH ASSISTANT PROFESSOR** (non-tenure earning) to work in the laboratory of a senior investigator, studying normal and malignant hematopoiesis, hematopoietic growth factor receptors, and signal transduction. Must have Ph.D. and minimum of three years of postdoctoral experience, preferably in area relevant to above research. Applications should be sent by May 4, 1995, to: **Ken Zuckerman, M.D., Director, Division of Medical Oncology and Hematology, Office of Faculty Recruitment, Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 33612**. Applicants who need a reasonable accommodation to participate in the selection process must notify **Jody Swanson** at 813-975-7894 five days in advance. The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Employer.

Utah: Board-certified/Board-eligible Pediatric Rheumatologist with strong laboratory background to join Department of Pediatrics and The Program in Human Molecular Biology and Genetics at the **ASSISTANT PROFESSOR** level on the tenure-track. An excellent scientific environment and support are available to establish an independent research career in molecular biology/immunology. Please contact: **John Bohnsack, Department of Pediatrics, 50 North Medical Drive, Salt Lake City, UT 84132**. The University of Utah is an Equal Opportunity/Affirmative Action Employer. We encourage women and minorities to apply.

## POSITIONS OPEN

### PARASITOLOGIST

The University of Illinois at Urbana-Champaign (UIUC) announces a full-time, tenure-track **ASSISTANT PROFESSOR** position in Parasitology within the Department of Veterinary Pathobiology in the College of Veterinary Medicine with a starting date of August 21, 1995. The successful applicant will have a Ph.D. and/or a D.V.M. with advanced academic training in parasitology. Duties will include teaching parasitology to veterinary and graduate students and the development of a strong research program. Appointments in the University of Illinois Laboratories for Veterinary Diagnostic Medicine and the Agricultural Experiment Station are available for an appointee who qualifies. Salary is negotiable and commensurate with qualifications.

Special consideration may be given to applicants with postdoctoral experience, demonstrable interest in veterinary parasitology or whose research interests will complement existing programs. Research strengths in the Department include studies on infectious diseases, molecular hemotropic disease, epidemiology, and pathology. There are opportunities for collaboration with other departments within the College, as well as departments in other colleges at UIUC.

Letters of application, curriculum vitae, and three letters of recommendation should be sent to: **Dr. C. J. Jones, Search Committee Chair, Department of Veterinary Pathobiology, College of Veterinary Medicine, 2001 South Lincoln Avenue, Urbana, IL 61801**. Telephone: 217-333-0330. To ensure full consideration, all materials should be received by May 1, 1995.

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

### ROBERT T. LAGEMANN ASSISTANT PROFESSOR OF LIVING STATE PHYSICS AND ASSISTANT PROFESSOR OF PHYSICS

The Department of Physics and Astronomy at Vanderbilt University invites applications for a three-year with possibility of renewal for two additional years, non-tenure-track, **RESEARCH/TEACHING POSITION** as the Robert T. Lagemann Assistant Professor of Living State Physics and Assistant Professor of Physics, starting with the fall semester, 1995. Candidates must have a proven research record in Computational Biophysics and Theoretical Cardiac Electrophysiology and be qualified to teach undergraduate and graduate courses in physics. Send curriculum vitae, copies of representative publications, and names and addresses of at least three references to: **John P. Wikswo, A.B. Learned Professor of Living State Physics, Vanderbilt University, Box 1807 Station B, Nashville, TN 37235**. Review of applications will begin on March 31, 1995, and will continue until the position is filled. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are particularly encouraged to apply.

### EXERCISE NEUROBIOLOGIST

The Department of Exercise Science seeks applicants specializing in the neurobiological aspects of exercise for a tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** position. Applicants should have an interdisciplinary research interest which would address fundamental mechanisms underlying the behavioral aspects of exercise. The successful applicant will be expected to teach selected courses at the undergraduate and graduate levels. Ph.D. or equivalent required and postdoctoral experience strongly preferred. Please send a curriculum vitae, a brief statement of research and teaching interests and three letters of reference to: **Dr. Harriet Williams, Ph.D., Department of Exercise Science, University of South Carolina, Columbia, SC 29208**. The deadline for receipt of application is April 15, 1995, or until the position is filled. An Affirmative Action/Equal Opportunity Employer.

### HAVERFORD COLLEGE

The Biology Department seeks a part-time, non-tenure-track **ASSISTANT PROFESSOR** for 1995-96 to teach a range of courses, including supervision of senior research in the candidate's area, and a half-semester lecture course in protein biochemistry. A Ph.D. is required. Send curriculum vitae, statement of research and teaching interests and telephone numbers of two recommenders by April 7, 1995, to: **Dr. Judy Owen, Haverford College, Haverford, PA 19041-1392**. FAX: 610-896-4963. Haverford College is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### UNIVERSITY OF SOUTHERN CALIFORNIA SCHOOL OF DENTISTRY ASSISTANT PROFESSOR

**ASSISTANT PROFESSOR** in craniofacial molecular biology is wanted for the Center for Craniofacial Molecular Biology in the School of Dentistry at the University of Southern California. The Center is dedicated for the investigations into molecular understanding of normal and abnormal cranio-oral-dental morphogenesis. *In vitro* strategies, molecular biology and transgenic animal models are required background experiences. Salary is dependent upon qualifications of the applicant. The position is available July 1, 1995. Review of applications will begin immediately and end May 1, 1995. Interested candidates should send a letter of application, a complete curriculum vitae and at least three letters of reference to: **Dr. Howard M. Landesman, Dean, School of Dentistry, University of Southern California, University Park, Los Angeles, CA 90089-0641**. USC is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

### HUMAN GENETICS FACULTY POSITIONS

The Department of Pediatrics, Division of Medical Genetics at Duke University Medical Center is seeking applicants for tenure-track or tenured positions at the **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level to join an expanding program of human genetics at Duke. Investigators (M.D., Ph.D., or M.D./Ph.D.) who have a record of productive research experience and who are interested in any aspects of Human Genetics (including gene therapy) are encouraged to apply. Those Board-certified or Board-eligible by the American College of Medical Genetics preferred. Attractive benefits and start-up funds are available. The positions offer significant scientific and scholarly resources and the candidates will work closely with other geneticists. Please send curriculum vitae, research plans, and names of three references to: **Y-T Chen, M.D., Ph.D., Professor and Chief, Division of Medical Genetics, Department of Pediatrics, Box 3528, Duke University Medical Center, Durham, NC 27710**. Duke University is an Equal Opportunity/Affirmative Action Employer.

The University of Pennsylvania, Department of Radiology is seeking qualified applicants for a position as a non-tenure-track **RESEARCH ASSISTANT PROFESSOR** in the area of High Resolution Acousto-Optical Mammography. Preference will be given to candidates with significant postdoctoral experience, outstanding research record and publications in refereed journals in this area. Strong theoretical and experimental background in ultrasound and optical phased array design and analysis, adaptive signal and imaging processing, and *in vivo* and *in vitro* ultrasound and optical wavefront measurements. Candidates must demonstrate strong ability to attract external funding. Send résumé with three references to: **Mitchell D. Schnall, M.D., Ph.D., Department of Radiology, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104**. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer. Minority and female applicants are encouraged.

### FACULTY POSITIONS

Applications are invited for full-time Ph.D. **FACULTY POSITIONS** in Medical Anatomy, Biochemistry, Microbiology, Pharmacology and Physiology.

Principal duties involve the teaching of first- and second-year osteopathic medical students in a curriculum utilizing a systems approach. Individuals with evidence of excellence in teaching and/or independent research funding will be given priority. Rank is open based upon qualifications and experience. Review of applications will begin immediately and will continue until the positions are filled. Submit a letter of application, curriculum vitae, and the names and addresses of at least three references to:

**Silvia Ferretti, D.O.**

**Dean and Vice President of Academic Affairs  
Lake Erie College of Osteopathic Medicine  
1858 West Grandview Boulevard  
Erie, PA 16509**

Lake Erie College of Osteopathic Medicine is an Affirmative Action/Equal Opportunity Employer and encourages female and minority candidates.

## ENDOWED RESEARCH CHAIRS

for

### Molecular Biology

SOUTHERN RESEARCH INSTITUTE, a diversified contract research organization, announces three new endowed research chairs, funded with \$1 million each, to expand the Institute's efforts in the field of molecular biology. The Institute is particularly interested in drug development and invites applications from molecular biologists who specialize in oncology, virology, toxicology and/or pharmacology.

THE SUCCESSFUL CANDIDATE will be expected to interact with other institute scientists in experimental therapeutics, toxicology, pharmacology, cell biology and immunology. Areas of interest include cancer therapeutics, carcinogenesis, and chemoprevention. Pertinent fields of work include gene therapy, antisense therapy, oncogenes, and transgenic animals in carcinogenesis and/or chemoprevention. Applicants should have competence in securing outside funding.

SOUTHERN RESEARCH INSTITUTE offers a stimulating working environment, generous benefits, modern equipment and facilities, and an extensive technical library. In addition, the endowed positions provide opportunities for extensive interaction with clinical and academic personnel at the University Of Alabama At Birmingham (UAB).

INTERESTED CANDIDATES should send curriculum vitae to Dr. Donald L. Hill, Search Committee Chairman, at the address below.



### Southern Research Institute

2000 Ninth Avenue South  
P.O. Box 55305  
Birmingham, Alabama 35255-5305  
(205)581-2463

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Pharmaceutical

## Associate/Staff Scientist

Be at the forefront of drug discovery research with The DuPont Merck Pharmaceutical Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals.

This position is in the protein expression lab. Specific tasks involve the production and preliminary analysis of recombinant proteins derived from microbial and yeast systems, at the plate, tube, flask and 1-10 liter fermentation scale.

BS/MS in Biology or equivalent experience required, along with experience in microbiology, fermentation and common molecular biology techniques. Must be competent in maintaining and adjusting lab fermentors. Protein purification, downstream processing and computer literacy skills are desirable.

DuPont Merck offers a competitive salary and a generous benefits package including 401K plan as well as excellent working conditions and challenging assignments.

Please send a letter of introduction and resume to: Human Resources-PRS, The DuPont Merck Pharmaceutical Company, Experimental Station, 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer M/F/D/V.

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Candidates must have a BS in Biological Science and typically 5 years' experience in protein purification, alkylation, reduction, digestion, sequencing, and hydrolysis; peptide mapping; and HPLC. Knowledge of basic protein chemistry and excellent instrumental maintenance skills are also required. An MS, knowledge of mass spectrometry, and 4 years of industrial experience are preferred.

At Amgen, you'll find our approach to scientific research as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks' vacation. Please mail your resume/c.v. to: Amgen Inc., Staffing, Job Code: OXP-SC-2334, Amgen Center, Thousand Oaks, CA 91320-1789. Principals only, please. For information on other research opportunities available at Amgen, please call 1-800-446-4007. EEO-Affirmative Action Employer M/F/D/V. We recognize that diverse perspectives are a key factor in the process of discovery.

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## POSITIONS OPEN

### THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

Environmental Studies, **ASSISTANT PROFESSOR/Instructor**, Tenure-Track, fall 1995. Ph.D. strongly preferred; active ABD considered. Expertise in Geographic Information Systems (ARC/INFO and GRASS) required. Will teach courses in GIS and additional area of expertise in the sciences, social sciences or technology and continue current articulation agreements in GIS with state agencies; require a strong commitment to undergraduate education including a research program involving students. Our multidisciplinary program with 300 majors and eight full-time faculty will move into a new building with state-of-the-art facilities in fall 1995. Stockton is a state-supported undergraduate liberal arts and sciences college located in the Pine Barrens about one hour from Philadelphia. Salary: \$30,529 to \$38,799. Salary may be higher depending on qualifications, experience and increases in the appropriately established compensation plan. Screening will begin May 1, 1995. Send résumé, three letters of recommendation and documentation of completion or expected date of completion of doctorate to: **Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, The Richard Stockton College of New Jersey, AA29, Pomona, NJ 08240-0195.** Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. R503389

### ASSISTANT/ASSOCIATE PROFESSOR DEVELOPMENTAL LUNG BIOLOGY

The University of Texas Health Science Center at San Antonio (UTHSCSA) has an opening in the Division of Neonatology for an M.D. or Ph.D. scientist with research interests and experience in transcriptional regulation of lung specific proteins during fetal and early postnatal development. Rabbit and baboon models will be used to study the extrauterine factors which influence acute and chronic lung injury after premature birth. The candidate must have demonstrated excellence in independent research and be experienced with lung explant cultures and surfactant protein regulation. The position involves the conduct of independent and collaborative research. Faculty appointment at the **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level commensurate with experience. Send letter of application, including current and future research plans, curriculum vitae, and three letters of reference to: **Steven Seidner, M.D., Department of Pediatrics, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, TX 78284-7812.** The UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.

Wisconsin: Marquette University School of Dentistry invites applications for a full-time, ten-month, tenure-track faculty appointment at the rank of **ASSISTANT PROFESSOR** working in the area of anatomical sciences. This position is available August 14, 1995 (starting date negotiable). The duties include teaching dental and undergraduate health professional students. In addition, applicants are expected to establish a strong research program. Ph.D. degree in the anatomical sciences or equivalent degree required. Postdoctoral teaching and research experience also required. Rank and salary commensurate with training and experience. Interested individuals should submit curriculum vitae and statement of research goals to:

**Ms. Susan Dalsasso**  
Assistant to the Dean, Administrative Services  
Marquette University School of Dentistry  
604 North 16 Street  
Milwaukee, WI 53233  
Application Deadline: May 1, 1995

Marquette University is an Affirmative Action/Equal Opportunity Employer.

Mammalian Ecologist, **ASSISTANT PROFESSOR**, tenure-track. Ph.D. in behavioral, conservation, disease, functional, or population ecology, or related field, and teaching ability required; postdoctoral experience preferred. Responsibilities: mammalian and wildlife (including field) biology/conservation courses; strong research program (including California environment-agriculture interface). Send curriculum vitae, publication list, statement of research and teaching interests, and names and addresses of three references to: **Tim Caro, Department of Wildlife, Fish, and Conservation Biology, University of California, Davis, CA 95616**, by May 1, 1995. The University of California is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### ASSISTANT PROFESSOR

The Marion Bessin Liver Research Center of the Albert Einstein College of Medicine is seeking candidates for two **TENURE-TRACK POSITIONS**. Individuals with M.D., Ph.D., M.D.-Ph.D. or equivalent degrees and appropriate postdoctoral training, whose research interests are in molecular biology, genetics, metabolism or cell structure/function, will be considered. Start-up package including initial salary, laboratory space, equipment and research expenses will be provided. Successful candidates will be expected to maintain an independent, externally funded research program and will participate in medical and graduate education as appropriate. Department affiliation will depend on research interests of candidate and compatibility of research with that of other faculty within the department. Submit curriculum vitae, a short statement of research plans and three letters of recommendation to: **David A. Shafritz, M.D., Director, Marion Bessin Liver Research Center, Albert Einstein College of Medicine of Yeshiva University, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.** Applications should be received by May 15, 1995. An Equal Opportunity Employer.

The College of Osteopathic Medicine and Department of Biological Sciences of Ohio University invite applications for a Tenure-Track **ASSISTANT PROFESSOR** in Physiology/Pharmacology beginning September 1, 1995 (starting date negotiable), with a minimum nine-month salary negotiable from \$34,000 plus comprehensive benefits. The successful candidate will be expected to teach medical students in a problem-based curriculum. Additional obligations include an administrative commitment to develop and coordinate clinical case studies in cooperation with clinical and other basic science departments. Minimum requirements include a Ph.D., postdoctoral training, and demonstrated research potential. Research area is open although preference will be given to candidates with teaching expertise in cardiovascular, gastrointestinal, musculoskeletal, renal, or respiratory systems. Send curriculum vitae, letter of research and teaching interests, and three letters of reference by April 30, 1995, to: **Physiology/Pharmacology Search, c/o Jean Witkowski, Department of Biological Sciences, Ohio University, Athens, OH 45701.** Ohio University is an Affirmative Action/Equal Opportunity Employer.

Two tenure-track **ASSISTANT PROFESSOR** positions: Applicants must have Ph.D., M.D. or equivalent and should have at least three years of postdoctoral research training. Preferred candidates should have demonstrated excellence in an area of research that would complement existing Departmental directions and related clinical collaborations. The successful candidates must develop independent, extramurally funded research programs and assist with Departmental teaching responsibilities. The positions are State-funded and nationally competitive. By May 1, 1995, send curriculum vitae, names and addresses of three references and a statement of research interests to: **Dr. I. G. Joshua, Professor and Chair, Department of Physiology and Biophysics, University of Louisville, KY 40292.** Women and minorities are strongly encouraged to apply. The University of Louisville is an Equal Opportunity/Affirmative Action Employer.

Three temporary, one-year, **FULL-TIME POSITIONS** in biology beginning September 16, 1995. Duties: teach undergraduate biology courses including those in one of the three specific positions, pursue research, and share in service activities. The candidate must demonstrate expertise to teach in 1) a cell/human biology position: introductory cell biology (with lab) and human anatomy and physiology (with lab); 2) a biochemistry/microbiology position: biochemistry (without lab), microbiology (with lab) and an advanced elective (immunology preferred); or 3) a systematics position: teach introductory survey of the kingdoms (with lab), an advanced elective in invertebrate biology (entomology preferred) and ecology lab. Minimum qualifications: ABD in a biological field (Ph.D. preferred) and two years of experience teaching undergraduates (graduate TA experience acceptable). Strong commitment to undergraduate teaching desired. Send letter of application specifying the desired position, résumé, copies of undergraduate and graduate transcripts, and three letters of reference to: **Biology Search Committee, Division of Science and Math, University of Minnesota, Morris, MN 56267-2128** to arrive by April 28, 1995. The University of Minnesota is an Equal Opportunity Educator and Employer.

## POSITIONS OPEN

### MOLECULAR/CELLULAR IMMUNOLOGIST

The Virginia Mason Research Center in Seattle, Washington, is recruiting an **ASSISTANT/ASSOCIATE PROFESSOR** level investigator to establish an independent research program in immunobiology. Preference will be given to applicants with expertise in molecular and cellular immunology, and whose interests interface with the highly interactive research environment at Virginia Mason Research Center, which emphasizes human immunogenetics and autoimmunity. Please reply by June 15, 1995, with curriculum vitae and statement of research interests to: **Gerald T. Nepom, M.D., Ph.D., Virginia Mason Research Center, 1000 Seneca Street, Seattle, WA 98101.** An Affirmative Action/Equal Opportunity Employer.

Two tenure-track faculty positions at the **ASSISTANT PROFESSOR** level available no later than September 1, 1995, in the Department of Pharmacology, University of Wisconsin Medical School, Madison, Wisconsin as part of a Departmental growth program. Applications are invited from individuals who possess the Ph.D. and/or M.D. degree and who will develop a vigorous research program in molecular and/or cellular pharmacology. Submit curriculum vitae and at least three letters of reference to: **Dr. Arnold Ruoho, Chair, Search Committee, Department of Pharmacology, University of Wisconsin Medical School, 1300 University Avenue, Madison, WI 53706.** The first-round deadline for this advertisement is April 15, 1995; however, the position will remain open until filled. The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer.

### TENURE-TRACK FACULTY POSITIONS BIOMEDICAL ENGINEERING DUKE UNIVERSITY

In conjunction with the Center for Cellular and Biosurface Engineering, applications are being accepted for **TENURE-TRACK FACULTY** positions in the Department of Biomedical Engineering at Duke University. Preference will be given to candidates having a Ph.D. or equivalent in either materials, chemical or biomedical engineering, and research interests in either macromolecular engineering, surface/membrane engineering, or tissue/cellular engineering. In addition to maintaining a vigorous research program, new faculty would be expected to participate in graduate and undergraduate instruction in one or more of the following areas: surface and interfacial phenomena, biomaterials, tissue/cellular engineering, biosensors, chemical thermodynamics, and transport in biological systems. A curriculum vitae including a list of publications, current research funding, teaching interests, and a description of research activities should be sent to: **W. M. Reichert, Chair, Search Committee, Box 90281, Department of Biomedical Engineering, Duke University, Durham, NC 27708-0281.** Email: [reichert@acpub.duke.edu](mailto:reichert@acpub.duke.edu). Duke University is an Equal Opportunity/Affirmative Action Employer.

Cornell College, a private undergraduate liberal arts college, invites applications for a one-year **SABBATICAL REPLACEMENT** appointment in its Department of Biology for 1995-96. Responsibilities include introductory biology (for majors and non-majors), cellular/molecular biology, genetics, and an upper-level course in a field of specialty (development or advanced topics in molecular biology). Shared appointment will be considered. Ph.D. required; college teaching experience preferred. Send letter, curriculum vitae, and three letters of reference to: **Ann Opatz, Assistant for Academic Recruitment, Cornell College, 600 First Street West, Mount Vernon, IA 52314-1098.** Formal consideration begins April 14, 1995. Cornell College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.

### ZOOLOGIST

Beloit College, a small liberal arts school with a strong reputation in the sciences, seeks a broadly trained zoologist (Ph.D. or ABD) to fill a one-year **SABBATICAL POSITION** starting fall 1995. Successful candidate will teach two courses per semester, including general zoology, comparative physiology, and one in area of specialty. Send curriculum vitae, teaching and research interests, list of relevant courses, and three letters of reference by 17 April 1995 to: **Ken Yasukawa, Beloit College, Biology Department, 700 College Street, Beloit, WI 53511.** Women and minorities are encouraged to apply. An Affirmative Action/Equal Opportunity Employer.

VYSIS, Inc. (formerly Imagenetics) is a growing business unit of Amoco Technology Company focusing on in-vitro medical diagnostics, specifically in the areas of genetic and cancer diagnostics. VYSIS is located in the Western Chicago suburb of Downers Grove. We have an immediate opening for:

## Scientist/Engineer Image Analysis Instrumentation

Will participate in the research and development efforts of a small team of scientists and engineers, working toward the development of DNA array based assays for the detection of human genetic disease. Specific responsibilities include the development of instrumentation for the analysis of microscope slide based DNA arrays by microscopy and direct CCD based image analysis. Additionally, the candidate will be involved in the development of small instrumentation for fluid handling. The ability to work independently toward team goals with a strong focus on commercialization is required.

Ph.D., M.S., or equivalent in Optical or Electrical Engineering, Physics, Biophysics, or Physical Biochemistry. Experience in optics and image analysis (microscope and direct CCD based) are essential, as well as experience in general instrument and specifically detection systems development for commercial application. Equally important is Macintosh programming experience (C/C++ and structured or object oriented programming). Strong oral and written communication skills are a must.

VYSIS, Inc. offers access to the finest technological and scientific resources. We provide a premier compensation and benefits package. Please send your resume to: Robert E. Hale, Human Resources Associate, ATC Diagnostics, Inc., 31 New York Avenue, Framingham, MA 01701; fax (508) 879-6462; tel (508) 935-1265.

We are an equal opportunity employer committed to strength through workforce diversity.



## SCHEPENS EYE RESEARCH INSTITUTE HARVARD MEDICAL SCHOOL

The Schepens Eye Research Institute, an affiliate of Harvard Medical School, seeks well-qualified (Ph.D., M.D./Ph.D., or M.D.) applicants for a position at the Associate Professor level to develop a basic research program in molecular biology and genetics of ocular immunity and inflammation. Resources and new laboratory space for initiation of this program have been provided by a generous grant from Lucille P. Markey Charitable Trust. Candidates should have experience at the faculty level in creating, sustaining and supporting an independent research program. The successful candidate should have experience in one or more of the following areas: transcription factors and molecular control of gene function, and signaling pathways among plasma membrane, cytosol, and nucleus as they relate to cytokines and their receptors and inhibitors. Candidates are expected to be able to recruit and support the growth of junior scientists to be included in this program, and to engender collaborative interactions with Institute scientists, to be active in the training of pre- and post-doctoral fellows, and to participate as a member of the Harvard Medical School faculty.

Applicants should send their curriculum vitae, a statement of research interests, and the names of three references by August 31, 1995 to:

J. Wayne Streilein, M.D.  
DeWalt and Marie Ankeny Director of Research  
Professor of Ophthalmology and Dermatology  
Harvard Medical School  
20 Staniford St.  
Boston, MA 02114

*SERI and Harvard Medical School are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.*



## Designing Our Descendants? Ethical, Legal and Policy Issues Raised by Genetic Engineering

**Sponsored by  
The Center for Bioethics,  
University of Pennsylvania  
Medical Center and The American  
Association of Bioethics**

**Dunlop Auditorium  
36th & Hamilton Walk  
University of Pennsylvania,  
Philadelphia, Pennsylvania  
May 18, 1995**

### 8:30AM Welcome and Introductions

Arthur Caplan, Ph.D., Director, Center for Bioethics, University of Pennsylvania Medical Center  
William N. Kelley, M.D., CEO, University of Pennsylvania Medical Center and Health System, Dean, University of Pennsylvania Medical School

### Session I:

#### The Science of Genetic Engineering

Markers and the Detection of Hereditary Susceptibility in Adults, Barbara Weber, M.D., University of Pennsylvania Medical Center

The Analysis of Genetic Traits in Gametes and Embryos, Jamie Grifo, M.D., Ph.D. Cornell University Medical Center

The State of Gene Therapy, James Wilson, M.D., Ph.D. University of Pennsylvania Medical Center

The State of Germline Engineering, Gary Hodgen, Ph.D., Eastern Virginia Medical School

### 10:00AM-10:30AM Questions & Coffee

### 10:30AM-12:00PM Session II:

#### What Sort of Oversight and Regulation Does Human Genetic Engineering Require?

National and International Guidelines for Genetic Engineering, Nelson Wivel, M.D. Director Office of Recombinant DNA Activities, National Institutes of Health

Legislation and the Role of the State and Federal Governments, George Annas, J.D. Boston University  
Can and Should Science and Medicine Police Themselves? George Lundberg, M.D. Editor, Journal of the American Medical Association

Does the Media Do An Adequate Job in Reporting on Genetic Engineering? Dorothy Nelkin, Ph.D., Sociology Department, New York University

### 12:00 - 1:00PM Lunch

### 1:00PM-3:00PM Session III:

#### "Should We Change The Human Genome?" A Roundtable Discussion

Charles Rosenberg, Ph.D., History and Sociology of Science, University of Pennsylvania

Arthur Caplan, Ph.D., Director, Center for Bioethics, University of Pennsylvania Medical Center

Ronald Green, Ph.D., Theology, Dartmouth

John Fletcher, Ph.D., Bioethics, University of Virginia

Gary Hodgen, Ph.D., Eastern Virginia Medical School

Eric Juengst, Ph.D., Case Western Reserve University

Ruth Ricker, President, Little People of America

Rev. Walter Brandon, DCSW, Sickle Cell Disease Association of America

Sedra Schiffman, Past President, National Tay-Sachs and Allied Diseases Association

### 3:00PM - 3:15PM Coffee

### 3:15PM-4:45PM Session IV:

#### Ethical Issues in the Diagnosis and Treatment of Genetic Diseases.

Should We Be Testing for Genetic Diseases and Disorders Before We Have Cures? Judy Garber, M.D., Cancer Institute, Harvard Medical School

Genetic Engineering, Disability and the Definition of Disease Adrienne Asch, Ph.D., Wellesley College

Genetic Information and the Patient: Impact on Privacy, Discrimination and the Family. Mildred Cho, Ph.D., Pew Fellow, Palo Alto Veterans Administration Medical Center

### 4:45PM-5:00PM Concluding Remarks

Arthur Caplan, Ph.D., Director, Center of Bioethics, University of Pennsylvania Medical Center



## POSITIONS OPEN

### DIRECTOR Undergraduate Chemistry Laboratory

The Massachusetts Institute of Technology Department of Chemistry is currently seeking a **DIRECTOR** of Undergraduate Laboratory (ULD) for the 1995-1996 academic year.

The ULD at MIT is the chief administrative supervisor of the teaching laboratories with direct responsibility for the management and operation of these facilities. Specific responsibilities: Supervise laboratory and teaching assistants; Oversee maintenance of laboratory equipment, facilities, and supplies; Train and enforce safety regulations; Maintain grade records for enrolled students; Schedule, plan, and coordinate laboratory exercises; Administer and plan instructional laboratory budget. This is a non-tenure-track, full-time position with continuation by mutual agreement between the ULD and the Department Head and the Faculty Coordinator of the laboratories.

An advance degree in chemistry, or a B.S. degree with substantial equivalent experience, is required.

Send curriculum vitae and three letters of recommendation by September 15, 1995, to: **Ms. M.-T. Kouo, c/o Mr. Ken Hewitt, MIT Personnel Office, Room E19-230, 400 Main Street, Cambridge, MA 02139.**

MIT is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.

### DEAN, SCHOOL OF PHARMACY VIRGINIA COMMONWEALTH UNIVERSITY

Virginia Commonwealth University invites nominations and applications for the position of **DEAN** of the School of Pharmacy. The Dean is responsible for supervising the operation and programs of the School, maintaining their quality, accountability, fiscal stability, and accreditation standards.

Candidates should have a doctoral or equivalent degree, demonstrated academic administrative experience, an understanding of health policy issues, and evidence of leadership in teaching, patient care, research and public service, and qualify for the rank of professor with tenure. A pharmacy background is desirable.

Letters of nomination are welcome. Applications will be accepted until 5:00 p.m. on Friday, July 14, 1995. Please address all correspondence to: **John E. Jones, M.D., Co-Chair, Dean of Pharmacy Search Committee, P.O. Box 980549, Richmond, VA 23298-0549.** Virginia Commonwealth University is an Affirmative Action/Equal Opportunity Employer. Women, minorities, and persons with disabilities are encouraged to apply.

### CHAIRPERSON DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

The University of Medicine and Dentistry of New Jersey (UMDNJ)-New Jersey Medical School invites nominations and applications for the position of **CHAIRPERSON** of the Department of Pharmacology and Toxicology. The successful candidate will have a nationally recognized record of achievement in research, a strong interest in the development of effective teaching programs, and be qualified for an appointment as a full professor. For further information or to apply, please send your curriculum vitae, no later than June 30, 1995, to: **Linda C. Reich, Office of the Dean, UMDNJ-New Jersey Medical School, MSB-C 662, University Heights, 185 South Orange Avenue, Newark, NJ 07103-2714.** UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer/Minority/Female/Disabled/Veteran and is a member of the University Health System of New Jersey.

### MICROBIOLOGY/CELL BIOLOGY

The Department of Biological Sciences at DePauw University invites applications for a one-year term position in microbiology/cell biology. This is a full-time position for the 1995-96 academic year which will start in mid-August. Teaching duties will include an introductory course in microbiology and an advanced course in cell biology/biochemistry, both with laboratories, as well as participation in a senior seminar course. The candidate should have received a Ph.D. degree on or before September 1, 1995. Review of applications will begin on April 6, 1995, and continue until the position is filled. Applicants should submit a curriculum vitae, a statement of teaching philosophy, a copy of graduate transcripts, and three letters of reference to: **Search Committee Chair, Department of Biological Sciences, DePauw University, Greencastle, IN 46135.** DePauw University is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### GEORGETOWN UNIVERSITY Chair of the Department of Microbiology and Immunology and Chief of the Division of Infectious Diseases, Department of Medicine

Georgetown University Medical Center is seeking a nationally known physician-scientist to **CHAIR** the Department of Microbiology and Immunology, serve as chief of the Department of Medicine's Division of Infectious Diseases, and direct the Medical Center's program in Infectious Diseases. The ideal candidate will possess both the M.D. and the Ph.D. degrees, with Board certifications in internal medicine and infectious diseases, and will have recognized scholarly expertise in microbiology. This individual will be responsible for recruiting new faculty, particularly in the area of immunology, and for the growth and development of the Department of Microbiology and Immunology. Qualified applicants will have demonstrated experience in managing a diverse group of microbiologists and immunologists, developing extramural research support, and supervising a clinical program in infectious diseases. Review of applications will begin immediately. Applicants should send a letter of interest stating their qualifications and accomplishments specific for this position and a curriculum vitae to: **Marc E. Lippman, M.D., Chair, Microbiology/Immunology Search Committee, Lombardi Cancer Center, Georgetown University Medical Center, 3800 Reservoir Road, N.W., Washington, DC 20007.** Georgetown University is an Affirmative Action/Equal Opportunity Employer.

### DIRECTOR, PROGRAM IN DIABETES RESEARCH

Department of Medicine at Case Western Reserve University, University Hospitals of Cleveland, and the V.A. Medical Center seek an outstanding investigator (M.D. or Ph.D.) to develop and direct a Program in Diabetes Research. Adequate research space and resources to recruit three additional faculty will be available. Applicants should submit curriculum vitae and names of three references to: **F. Ismail-Beigi, M.D., Ph.D., Clinical and Molecular Endocrinology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4951.** Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minority groups are encouraged.

### FACULTY POSITION IN NATIONAL TAIWAN UNIVERSITY

The Institute of Molecular Medicine invites applications for a junior or senior **FACULTY POSITION**. Candidates with strong credentials in a modern area of developmental and differential regulations are especially encouraged to apply; however, outstanding candidates in all areas of cellular biology will be given serious consideration. Appointee must have a Ph.D. or M.D. degree and at least two years of postdoctoral experience with outstanding publication record. Appointment provides excellent opportunities to develop strong research programs in newly built state-of-the-art facilities in a top-ranked, expanding institute and medical school. Send curriculum vitae, brief statement of interest and proposed future research interest, representative reprints, and have three letters of recommendation sent independently by May 15, 1995, to: **Dr. Sheng-Chung Lee, Director, Institute of Molecular Medicine, School of Medicine, National Taiwan University, No. 7 Chung-Shan South Road, Taipei, Taiwan, ROC.** FAX: 886-2-321-0977.

### POSTDOCTORAL RESEARCH IN RNA STRUCTURE DETERMINATION

**POSTDOCTORAL POSITIONS** are available immediately to investigate RNA structure using NMR spectroscopy. The candidate should have a strong training in computational aspects of structure determination and/or high resolution NMR spectroscopy of proteins or nucleic acids. Current research projects include structural studies on viral RNA-protein interactions, the mechanism of aminoglycoside antibiotic function, ribosomal protein RNA-interactions, and tRNA recognition by the ribosome.

Please send a curriculum vitae, a statement of research interests and the names of three references to: **Dr. Joseph D. Puglisi, Department of Chemistry and Biochemistry, and Center for Molecular Biology of RNA, University of California, Santa Cruz, CA 95064.** Telephone: 408-459-3961; FAX: 408-459-3737.

## POSITIONS OPEN

The Creighton-Nebraska Department of Psychiatry is seeking an individual with a Ph.D. and postdoctoral training in neuropharmacology or a related discipline. The applicant should have achieved some recognition in research relevant to CNS function which is of potential application to the understanding and treatment of human psychopathology. It is expected that the successful candidate for this position will establish an independent research program capable of attracting external funding. **FACULTY** rank and salary commensurate with experience. Send curriculum vitae, statement of research interests, and three letters of reference to: **William Burke, M.D., Director of Research, Department of Psychiatry, 600 South 42nd Street, Omaha, NE 68198-5575.** Women and minorities are encouraged to apply. Equal Opportunity/Affirmative Action Employer.

**RESEARCH INSTRUCTOR**—grant funded position teaching postgraduate fellows in techniques for measuring hemodynamics in rats including measurement of chronic cardiac output and blood flow using implanted flow probes; independent research in calcium metabolism and hypertension. Minimum qualifications: M.D. or Ph.D. in physiology with five years of postdoctoral experience teaching surgical procedures; experience measuring catecholamines with HPLC; experience measuring renal function; evidence of scholarly activity in hypertension research; experience with dietary manipulation of electrolytes in animals. Recruitment period: 30 days. Send curriculum vitae and names of three references to: **J. Bauer, Nephrology, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, PP262, Portland, OR 97201.** An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL FELLOW** in fluorescence microscopy and lifetime imaging. Requires a Ph.D. in the physical or biological sciences with two years of experience in fluorescence microscopy and cell physiology and/or imaging. The individual should have experience with handling and labeling of cell cultures. Experience with time-resolved fluorescence, frequency-domain methods, light modulation, electro-optics, and ps lasers desirable. Send résumé, three letters of recommendation, and representative reprints to: **Dr. Joseph R. Lakowicz, University of Maryland School of Medicine, Center for Fluorescence Spectroscopy, Department of Biochemistry, 108 North Greene Street, Baltimore, MD 21201.** An Equal Opportunity Employment/Affirmative Action Employer.

**POSTDOCTORAL POSITION** available immediately to study inflammatory factors associated with chronic cardiac rejection and transplant arteriosclerosis. The project involves *in vivo* and *in vitro* modulation of molecules previously identified by differential display within rat cardiac allografts undergoing chronic rejection (*Proc. Natl. Acad. Sci.*, 1994; *J. Clin. Invest.*, 1994). Candidates should possess an M.D. or Ph.D. with a background in molecular immunology, vascular or cell biology. Forward curriculum vitae and names of three references to: **Mary E. Russell, M.D., Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115.** FAX: 617-432-2980.

**POSTDOCTORAL POSITION** available for training in cell and molecular biology of extracellular matrix, including basement membranes, elastin and collagen genes, biology of inflammation, regulation of cartilage collagen genes and role of laminin in neoplasia. Send résumé to: **Nicholas A. Kefalides, M.D., Ph.D., Director, Connective Tissue Research Institute, University of Pennsylvania, University City Science Center, 3624 Market Street, Philadelphia, PA 19104-2614.** Candidates should be U.S. citizens or permanent residents. An Equal Opportunity/Affirmative Action Employer.

Harvard/**POSTDOCTORAL POSITIONS** are available to study molecular mechanisms of arteriosclerosis and hypertension with special emphasis on molecular cloning, transcriptional regulation, and biological function of genes important for growth and differentiation of vascular endothelial and smooth muscle cells (endothelin, HB-EGF, and a recently cloned novel gene, ASG-1). Experience with molecular biology or protein chemistry is required. Please send curriculum vitae and names of three references to: **M. E. Lee, M.D., Ph.D., Cardiovascular Biology Laboratory, Building 2, Room 129B, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

## University of Massachusetts Medical School

### TWO FACULTY POSITIONS IMMUNOLOGY AND VIROLOGY

The Department of **Molecular Genetics and Microbiology** seeks outstanding candidates with a Ph.D. and/or M.D. degree and postdoctoral training to fill two 12 month tenure track positions, one in immunology and one in virology, at the assistant, associate, or full professor level. All areas of immunology and virology will be considered. Successful candidates will be expected to develop vigorous, externally funded research programs which will complement ongoing research in the department and school. Participation in medical student and graduate student teaching will also be expected. The Medical Center has two training grants to support pre- and post doctoral students in immunology and virology. Also available are core facilities for FACS analysis, peptide synthesis, antibody production, DNA synthesis, and transgenic animals as well as a P3 virus laboratory.

Interested scientists should send their curriculum vitae, bibliography, names of three individuals willing to serve as references, and a statement of research interests to:

**Dr. Trudy Morrison or Dr. Janet Stavnezer**  
**Virology and Immunology Search Committee**  
**Department of Molecular Genetics and Microbiology**  
**University of Massachusetts Medical School**  
**55 Lake Avenue North**  
**Worcester, MA 01655-0122**

*Equal Opportunity/Affirmative Action Employer*

## Biological Oceanographer

The Ocean Sciences Element in the Division of Earth and Space Sciences at the Jet Propulsion Laboratory invite applications for a research oceanographer experienced with numerical models of nitrate-phytoplankton-zoo-plankton dynamics, upper ocean biological-physical interactions, and air sea gas exchange. The successful candidate will join a research group of physical oceanographers involved in studies of the physics of ocean circulation, and in studies of the physics of ocean-atmosphere interactions, including ice-ocean-atmosphere interactions. The group emphasizes interpretations of satellite measurements and ocean model simulations and the assimilation of satellite measurements into model for studies of seasonal-to-interannual to-decadal phenomena.

The selected candidate will conduct interdisciplinary research and use the next generation ocean color data sets, as well as establish an innovative research program on coupled biological-physical upper ocean models. These models will be embedded in ocean circulation models and assimilate satellite observations.

This full-time position is funded by NASA via peer-review proposal. The position is available immediately, and funds for the first year are available. Minimum requirements are a PhD or equivalent in ocean sciences, experience in ocean plankton ecology, experience in computer/mathematical modeling, and demonstrated research ability with expertise and/or the capability to work at the interface of biological and physical oceanography. Level of appointment and salary will be commensurate with experience.

Applicants should send a letter describing their interests, a curriculum vitae, list of publications and the names of at least three references to Dr. David Halpern, Jet Propulsion Laboratory M/S 300-323, California Institute of Technology, Pasadena, CA 91109-8099. Applications received by May 10, 1995 will be assured full consideration. The search will remain open until the position is filled.

*The Jet Propulsion Laboratory is an equal opportunity/affirmative action employer.*

**JPL**  
Jet Propulsion Laboratory  
California Institute of Technology

## RESEARCH ASSOCIATE

Pioneer Hi-Bred International, Inc., is a worldwide leader in agricultural genetics. Founded in 1926, we are a publicly-held corporation with research, production, and sales organizations worldwide. Our dynamic RESEARCH AND PRODUCT DEVELOPMENT DIVISION is currently seeking motivated and experienced professionals to join us in our on-going program and crop improvement.

This is an opportunity to conduct experiments utilizing microprojectile bombardment to transform maize in vitro cultures, evaluation of agronomic genes in transgenic corn plants and progeny, and working with teams to ensure that transgenic cultures and plants are properly analyzed and progeny is obtained.

Qualifications include: MS degree in plant physiology, biochemistry, biology or related field or a similar BS degree and two years of directly related lab experience; high degree of knowledge in monocot (corn) transformation and tissue culture, genetics, plant physiology, cell biology and biochemistry; excellent communication and organizational skills; computer spreadsheet experience; statistical analysis experience.

The successful candidate will receive a competitive compensation and benefits package, career growth opportunities, and enjoy a cooperative research environment. Applicants should send cover letter (indicating Research Associate Job #1047), resume, and three career related references by April 24th to: Linda Tuttle, Pioneer Hi-Bred International, Inc., 7300 NW 62nd Avenue-Box 1004, Johnston, IA 50131-1004. Pioneer Hi-Bred International, Inc. is an Equal Opportunity Employer.

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

**Miles, Inc., Pharmaceutical Division has exciting career opportunities for motivated professionals in our Pharmacokinetics and Drug Metabolism Department.**

## Associate Research Scientist

We are seeking an individual to assist in the design and execution of in vitro drug metabolism studies in the support of drug development, under the supervision of a Sr. Research Scientist. You will study the metabolism of drugs in various mammalian species and conduct in vitro experiments designed to predict the metabolism of drugs in man. Responsibilities include the preparation of liver subcellular fractions from various mammalian species, preparation of liver slices, and development and utilization of bioanalytical methods for monitoring and identifying metabolites. Additional responsibilities include data analysis and preparation of tables and graphs for reports.

Qualified candidates must possess a BS degree with 2 or more years' proven experience, or an MS degree with minimal experience in biology, biochemistry or related areas and experience in in vitro drug metabolism. Demonstrated skills in the preparation of subcellular fractions, in vitro enzyme assays, and liver slicing techniques are required. Preparation of hepatocytes and the use of immunochemical techniques (Western blot, ELISA), as well as demonstrated problem solving ability, excellent oral and written communication skills and the ability to work with minimal supervision necessary. Experience in handling radioisotopes, a working knowledge of analytical techniques (HPLC, spectroscopy, gel electrophoresis) and tissue culture experience are desired.

## Research Scientist-Bioanalytics/Toxicokinetics

The successful candidate will have primary responsibility for the development, supervision, validation and reporting of analytical/bioanalytical methods to support preclinical pharmacokinetics and toxicokinetic studies for IND/NDA and international filings. The candidate will establish a bioanalytical laboratory (HPLC, GC, LC/MS) for analytical methods development and validation in the trace analysis of drugs and metabolites in biological fluids. Candidate will also be responsible for introduction of new technology (CZE, SFC) and evaluation of LIMS systems. The candidate will supervise technicians, participate in the implementation of GLP, represent Pharmacokinetics on interdisciplinary project teams, and serve as study director on preclinical studies and scientific monitor of contract laboratory work.

A Ph.D. in analytical/pharmaceutical chemistry or related discipline required with a minimum of 2 years' industrial or postdoctoral experience in the development and validation of methods of the trace analysis of xenobiotics in biological matrices. Demonstrated strong theoretical and practical knowledge of HPLC, GC, and LC/MS required. Strong background in method development and validation, derivatization, robotics and proven ability to meet new challenges such as chiral separations and analytics for proteins and peptides required.

These positions offer attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. Resumes including salary history should be forwarded to: Miles, Inc., Pharmaceutical Division, Dept. ELWB, Mail Code B25-HRA, 400 Morgan Lane, West Haven, CT 06516. An Equal Opportunity Employer M/F/D/V.

**MILES**   
Pharmaceutical  
Division



## POSITIONS OPEN

### UNIVERSITY OF DUNDEE, SCOTLAND POSTDOCTORAL POSITION

Department of Anatomy and Physiology  
Cardiac Membrane Transport

This post, funded by the British Heart Foundation for two years, is available immediately to investigate the regulation of cardiac glutamate and glutamine transport in myocytes using electrophysiological, tracer flux and molecular biological techniques. Qualified candidates should possess a Ph.D. and a strong interest in the field of membrane transport. Experience in any one of the above techniques would be an advantage. The candidate will join an active and rapidly expanding group interested in the functional and molecular aspects of cardiac amino acid transport and metabolism. Informal enquiries are encouraged and may be made to: Dr. A. Ahmed; Telephone: 01382-344574 or Dr. A. Harper; Telephone: 01382-344971. Salary £13,941 to £14,756.

Curriculum vitae (two copies), together with the names and addresses of two referees, should be sent to: Personnel Services, The University, Dundee, DD1 4HN. Please quote Reference: EST/448/455C.

Closing date: 14 April 1995.

The University is an Equal Opportunities Employer.

### POSTDOCTORAL/MOLECULAR BIOLOGIST

The Department of Pathology at the University of Colorado School of Medicine has an immediate opening for a postdoctoral fellow to develop/implement molecular assays for rare tumor cell detection. Position requires familiarity with PCR, basic cloning techniques and DNA sequencing. Ph.D. in molecular biology or related field required. Please send curriculum vitae to:

Wilbur A. Franklin, MD  
Department of Pathology - UCHSC  
4200 East Ninth Avenue, Box B216  
Denver, CO 80262

The University of Colorado is committed to Affirmative Action and Equal Opportunity Employment.

### POSTDOCTORAL POSITIONS

**POSTDOCTORAL POSITIONS** at The Center for Blood Research and Harvard Medical School. Applicants should have experience in immunology and molecular genetics. Projects are concerned with (1) the human immune response, its control by major histocompatibility complex, T cell receptor and other genes; (2) mechanisms by which major histocompatibility and other genes cause IgA deficiency in humans; and (3) mechanisms by which major histocompatibility genes cause autoimmune disease. Send curriculum vitae, covering letter and the names of three persons who can write letters of reference to: Dr. Chester A. Alper, The Center for Blood Research, 800 Huntington Avenue, Boston, MA 02115. An Equal Opportunity Employer.

### POSTDOCTORAL POSITION

A **POSTDOCTORAL POSITION** is available immediately in the Protein Chemistry Facility at the W. Alton Jones Cell Science Center. This position requires experience in molecular biology and cell culture technology. The successful candidate will participate in functional domain analysis of CRALBP, a visual cycle protein, using site-directed mutagenesis and recombinant protein production. The position provides the opportunity to also gain experience with methods in protein chemistry, including automatic Edman sequencing and electrospray mass spectrometry. Send curriculum vitae and names and addresses of three references to: Dr. John W. Crabb, c/o Personnel Department, W. Alton Jones Cell Science Center, 10 Old Barn Road, Lake Placid, NY 12946. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately to study the interactions between cytochrome P450s, NADPH cytochrome P450 reductase, and cytochrome b<sub>5</sub> by steady-state and time-resolved fluorescence and analytical ultracentrifugation. Experience in protein chemistry and/or these techniques preferred. Send curriculum vitae with names, addresses, and telephone numbers of three references, to: Dr. William R. Laws, Department of Biochemistry, Box 1020, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. FAX: 212-996-7214. An Equal Opportunity Employer.

## POSITIONS OPEN

### UCLA SCHOOL OF MEDICINE POSTDOCTORAL POSITION

**POSTDOCTORAL RESEARCH POSITION** available July 1, 1995, for the study of crossbridge mechanisms and their regulation. The studies in this project involve the use of laser flash photolysis of caged compounds in single muscle fibers and the recording of force, displacement, stiffness and ATPase activity. Additional studies involve the use of *in vitro* motility assays using labeled actions, myosin, and regulatory proteins. A background in biochemistry, biophysics or cellular physiology is desirable. Interested persons should send a curriculum vitae and names and addresses of three references to:

Dr. Earl Homsher  
Department of Physiology  
UCLA School of Medicine  
Los Angeles, CA 90024-1751

### THE NEUROSCIENCES INSTITUTE LA JOLLA CELLULAR NEUROPHYSIOLOGY

Applications are invited for the **POSTDOCTORAL POSITION** of Junior Fellow in Experimental Neurobiology to study synaptic physiology, plasticity, and specificity in mammalian neocortex using state-of-the-art brain slice methodologies. Applicants should have a background in electrophysiology and an interest in developmental neurobiology. Fellows will receive stipends appropriate to their qualifications and experience. Submit a curriculum vitae, statement of research interests, and names of three references to: Dr. Ronald B. Langdon, The Neurosciences Institute, 3377 North Torrey Pines Court, Suite 310, La Jolla, CA 92037. FAX: 619-554-9159.

**POSTDOCTORAL POSITION** is available in the Division of Hematology at The Children's Hospital of Philadelphia and the Department of Pediatrics of the University of Pennsylvania. Interests of the laboratory include structure-function relationships and regulation of expression of the vitamin K dependent clotting factors. The laboratory has recently received major funding to develop experimental basis for gene therapy of hemophilia B. Institutional resources include the Institute for Human Gene Therapy at Penn. Interested candidates should send curriculum vitae, state of research experience and names of three references to: Dr. Katherine High, The Children's Hospital of Philadelphia, Division of Hematology, 324 South 34th Street, Philadelphia, PA 19104. Email: Bucklaw@mail.chop.edu. Equal Opportunity Employer/Affirmative Action/Minority/Female/Disabled/Veteran.

### DIABETES RESEARCH

Two **POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS** available to study pancreatic islet biochemistry. One to conduct enzymic and cell biology work and one to study promoters of genes expressed in the insulin cell. Send curriculum vitae to: Dr. Michael J. MacDonald, University of Wisconsin Medical School, 1300 University Avenue, Madison, WI 53706. FAX: 608-262-9300.

**POSTDOCTORAL POSITION** available to investigate the regulation of signal transduction pathways activated by rhodopsin at the molecular level. Studies will focus on mutagenesis, *in vitro* expression and protein-protein interaction to identify sites critical for G protein coupling and desensitization through phosphorylation. Send curriculum vitae and three letters of recommendation to: Dr. Ellen R. Weiss, Department of Cell Biology and Anatomy, The University of North Carolina at Chapel Hill, CB No. 7090, 108 Taylor Hall, Chapel Hill, NC 27599. Application deadline May 15, 1995. An Equal Opportunity/Affirmative Action Employer.

### RADIATION PHYSICS AND BIOLOGY

Applications are invited for a **POSTDOCTORAL POSITION** to study the toxic and therapeutic effects of radionuclides in animal and cell models. Requirements include a doctoral degree in radiation physics, radiation biology, or the biological sciences. Contact: Roger W. Howell, Ph.D., Department of Radiology, MSB F-451, University of Medicine and Dentistry, 185 South Orange Avenue, Newark, NJ 07103. Email: rhowell@njms.umdj.edu or FAX: 201-982-6474. The University of Medicine and Dentistry of New Jersey is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### POSTDOCTORAL POSITION BROWN UNIVERSITY DIVISION OF BIOLOGY AND MEDICINE

Position available for individual interested in areas of protein structure-function, gene structure and regulation, protein-nucleic acid interactions, or molecular mechanisms of recombination. Previous experience with (or desire to learn) protein chemistry, nucleic acid biochemistry, DNA cloning, genetics or *in vitro* systems.

Please send curriculum vitae with desired starting date and list of three references to: Arthur Landy, Brown University, Box G-J360, Providence, RI 02912.

Brown University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITIONS** available to study cell signaling and regulation of differentiation/development via G-proteins. Analysis of function by elimination of G-protein subunits *in vitro/in vivo* and biochemically via reconstitution of expressed proteins. Emphasis on G-protein regulation of phospholipase C, phosphoinositide-3-kinase, and MAPK/JNK regulatory network. Ph.D. or equivalent, background in biochemistry, cell and/or molecular biology required. Send résumé, description of career goals, and references to: Drs. Andrew Morris and Craig Malbon, Department of Molecular Pharmacology, DMDRP, University Medical Center, SUNY/Stony Brook, Stony Brook, NY 11794-8651. FAX: 516-444-7696. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION**—Available for a highly motivated scientist to study the molecular biology of RNA plant viruses. Projects involve investigations of virus replication, pathogenesis, and cell-to-cell movement. Demonstrated abilities in PCR, complex cloning protocols, site-directed mutagenesis, and *in vitro* transcription and translation with previous experience with plant viruses. Researcher will work in the Bowman Gray Technical Center, Winston-Salem, North Carolina. Application deadline is April 15, 1995. Send curriculum vitae, transcript, and three letters of reference to: Dr. O. W. Barnett, N.C. State University, Box 7616, Raleigh, NC 27695. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately to study pharmacology of synaptic transmission in long term potentiation and epileptogenesis. A Ph.D. or M.D. and some experience in electrophysiology is required. Experience using patch or sharp-electrode intracellular recording techniques is desirable but not required. Forward curriculum vitae, three references, and description of previous research projects to: Dr. M. S. Evans, Department of Neurology, Southern Illinois University School of Medicine, Box 19230, Springfield, IL 62794. FAX: 217-524-4539; Email: sevans@neuro.siumed.edu.

### POSTDOCTORAL POSITION

**POSTDOCTORAL POSITION**, three years, available to study *in vitro* bacteriophage DNA metabolism (packaging) by use of genetics, biochemistry and video light microscopy. Send curriculum vitae, references and statement of research objectives to: Dr. Philip Serwer, Department of Biochemistry, The University of Texas Health Science Center, San Antonio, TX 78284-7760. FAX: 210-567-6595.

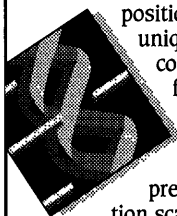
**POSTDOCTORAL POSITION**—A postdoctoral position is available to study the structure/function relationships of proteins involved in DNA recombination and proteins associated with the signal transduction pathways by means of X-ray crystallography and molecular biology. Prior background in recombinant DNA techniques and protein purification preferred. Send curriculum vitae and names of three references to: Dr. Jan Feng, c/o Human Resources-MAS, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. An Equal Opportunity Employer.

**SENIOR POSTDOCTORAL POSITION** available immediately for HIV drug resistance, drug development, and pathogenesis-related projects. Molecular biology experience is required. Competitive salary. Send curriculum vitae to: Victoria A. Johnson, M.D., Departments of Medicine and Microbiology, University of Alabama at Birmingham, 1900 University Boulevard, 229 Tinsley Harrison Tower, Birmingham, AL 35294-0006. Equal Opportunity/Affirmative Action Employer.

## A RARE OPPORTUNITY AT GENENTECH.

You won't find too many companies around that offer postdoctoral opportunities in process science. And of those companies, you won't find a better opportunity than at Genentech. Our Postdoctoral Program consists of more than 50 Fellows and is a vibrant and intensive environment for advanced scientific training. Fellows conduct basic research in the areas of our scientific interests, publish in scientific journals, attend and present work at scientific conferences as well as maintain close ties with the academic community.

We currently have a Postdoc position which offers a unique opportunity to combine structure-function research of proteins with advanced training in methods of preparative and production scale chromatography.



The ideal candidate will conduct research on recombinant antibody fusion proteins that are of therapeutic interest. A Ph.D. in Biochemistry with significant experience in molecular biology, protein expression and purification is required. Additional experience in immunology is desired. See Nature 337, 525 (1989); Biochemistry 29, 9885 (1990); PNAS 88, 10535 (1991); Bioconjugate Chem. 5, 133 (1994); Molec. Immunology 31, 01335 (1994); Journal of Immunology 153, 4268 (1994).

Genentech offers an excellent salary and benefits package which includes child care resources, free health club membership and fully paid medical, dental and vision coverage. For immediate consideration, please send your resume to Genentech, Inc., Attn: Dr. Steven Chamow, Department of Recovery Sciences, c/o Human Resources, Dept. NSSC, Mail Stop 39, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

**Genentech, Inc.**

## DRUG DISCOVERY IN HEMATOPOIESIS

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has a challenging opportunity within the Department of Molecular Virology and Host Defense, a 46-member group whose activities encompass basic and applied research on many aspects of molecular virology and the immunology of infectious diseases including discovery of novel anti-virals, viral pathogenesis, immunomodulation and hematopoietic cytokine research.

Working with a Senior Investigator, the selected candidate will carry out experimental strategies focused on hematopoietic cells involving the analysis of differentially expressed genes; development of new assays to study signal transduction events; and evaluation of the mechanism of action of hematopoietic compounds. The qualified candidate will have a BS or MS in a biological science with at least 3-6 years' postgraduate experience. Excellent laboratory skills in molecular and cellular biology are required, including expertise with cell and tissue culture; isolation, analysis and electrophoresis of nucleic acids and proteins; and recombinant DNA cloning and the analysis of gene expression. Experience with cell biological and biochemical assays, various applications of PCR, and cDNA library construction is desirable, preferably applied to the study of cells from hematopoietic lineages. Experience with data analysis and good communication skills are necessary, with industry experience preferred.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation and benefits package, including relocation, and a stimulating work environment in which to grow and excel. For confidential consideration, please send resume with salary history to: SmithKline Beecham Pharmaceuticals, Job Code H4-0295, P.O. Box 679, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

Challenging the natural limits.

## Associate Director Statistical Analysis and Clinical Evaluation

As a prominent leader in the health care industry and in response to shifting needs and trends, we are searching for an individual to assist in the development of goals and plans relating to our Department of Research and Evaluation.

Primary responsibility for this position is to coordinate statistical analysis and data management activities with research development and clinical evaluation efforts as well as supervise staff in the sections on data



management, biostatistics, and on Accreditation of Healthcare Organizations clinical evaluation.

Also, you will assist in the development and administration of departmental budgets and establish standards for effective job performance, including evaluations. In addition, assist in coordination of educational programs, oversee daily operations of research projects and monitor projects to ensure that research conducted is completed in

a highly professional manner and is statistically appropriate.

An earned academic (eg. PhD, ScD) or professional (eg. MD, DrPH) doctorate, with training in biostatistics is required. Candidates should have experience in teaching, research and/or health care delivery/administration and experience with sampling techniques, risk adjustment, and advanced experimental design/statistical analysis along with strong managerial, analytical and communication skills.

### Joint Commission

We are committed to high standards of individual and team performance. We can

offer the experienced professional an opportunity for a challenging, rewarding career. Please forward resume/salary requirements to: **Department SACE/RHC, Joint Commission on Accreditation of Healthcare Organizations, One Renaissance Boulevard, Oakbrook Terrace, IL 60181. Equal Opportunity Employer M/F/D/V**



## POSITIONS OPEN

**POSTDOCTORAL POSITION:** Available immediately to participate in ongoing studies of the role of the Hox-D homeotic gene cluster in male urogenital tract development and prostate morphogenesis in the mouse. Funding available for qualified candidates with experience in molecular techniques and either developmental or reproductive biology. Applicants should send a curriculum vitae and three letters of reference to: **Wade Bushman, M.D., Ph.D., Department of Urology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611 USA.**

**POSTDOCTORAL POSITION** is available immediately to study the role of the inositol phosphate cascade in signal transduction. Experience with single cell electrophysiology, microinjection and microfluorimetry is highly preferred. The position is available for up to three years. Applicants should forward curriculum vitae, description of previous research experience and names of three references to: **Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030-3505.** An Affirmative Action/Equal Opportunity Employer. Minority/Female/People with Disabilities/Veteran.

A **POSTDOCTORAL POSITION** to study Genetic Vaccination and Malaria vaccines is available at the Malaria Program, Naval Medical Research Institute, Bethesda, Maryland. Training in eukaryotic protein expression, and an interest in immunology desirable. Research will focus on optimizing vaccination by incorporation of costimulatory molecules into plasmids (PNAS, 91:9866, 1994). Send curriculum vitae and three references to: **Dr. Walter Weiss, NMRI Annex, 12300 Washington Avenue, Rockville, MD 20852.**

**POSTDOCTORAL POSITIONS** available: new well-funded initiative in the gene therapy of heart muscle disease. For one of the positions U.S. citizenship or permanent residency required. Applicants should possess a Ph.D. or M.D. and a background in molecular biology or virology. Interested candidates should send curriculum vitae and names of three references to: **Drs. Paul Kessler or Barry Byrne, Johns Hopkins School of Medicine, Ross Research Room 812, 720 Rutland Avenue, Baltimore, MD 21205. Telephone: 410-614-0707; Email: bbyrne@welchlink.welch.jhu.edu.**

**POSTDOCTORAL POSITION** available immediately to study the biology of cellular responses to hypoxia and the effects of pharmacologic modulating agents of the hypoxic response. Experience in gene expression or signal transduction is desirable. Studies will be conducted in tumor cell lines *in vitro* and in immunodeficient mice. Send curriculum vitae with references to: **Dr. Peter O'Dwyer, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** An Equal Opportunity Employer.

**POSTDOCTORAL POSITION**—To participate in studies of DNA replication in yeast. The research involves the use of molecular genetics and biochemistry to study the mechanism of initiation and regulation of DNA replication in *S. cerevisiae*. Send curriculum vitae, brief description of prior research experience, and the names of several references to: **Dr. S. Eisenberg, University of Connecticut Health Center, Farmington, CT 06032.**

An Affirmative Action/Equal Opportunity Employer. Minority/Female/People with Disabilities/Veteran.

**POSTDOCTORAL POSITION.** Available to study the structure and function of membrane glycoproteins of lung epithelial cells (NIH funded). Basic techniques in molecular biology including site-directed mutagenesis/transfection or in transcriptional regulation are required. Send a résumé and names of three references to: **K. C. Kim, Ph.D., Department of Pharmaceutical Sciences, University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201. FAX: 410-706-2973.**

**POSTDOCTORAL FELLOWSHIPS** are available in the Cardiovascular Biology Laboratory at the Harvard School of Public Health beginning July 1995. The goal of these research projects is to identify cellular and molecular events in platelets and foam cells that lead to vascular occlusion. Previous research experience in molecular biology or cell biology is preferred. Please reply in letter form with curriculum vitae, and the names of three references to: **Dr. Guy L. Reed, Harvard School of Public Health, II-127, Boston, MA 02115.**

## POSITIONS OPEN

### POSTDOCTORAL FELLOW POSITIONS ATHEROSCLEROSIS/MOLECULAR MECHANISMS

Position available to study structure-function relationships of apoA-I. Studies will include molecular, biophysical, and enzymatic studies utilizing protein derived from a baculoviral expression system. Experience in Biochemistry and Molecular Biology necessary. Applicant must have been supported less than three years on a training grant and be a citizen or permanent U.S. resident.

Send curriculum vitae and names of three references to:

**Dr. Mary Sorci-Thomas  
Department of Comparative Medicine  
Bowman Gray School of Medicine of  
Wake Forest University  
Medical Center Boulevard  
Winston-Salem, NC 27157  
FAX: 910-716-6279**

*Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL FELLOWSHIP VISION RESEARCH

The Margaret M. Dyson Vision Research Institute is seeking a vision **SCIENTIST** interested in the cellular and molecular biology of retinal function. An interest in glaucoma or optic nerve regeneration is desirable. The successful candidate must hold the Ph.D. or M.D. degree and will be expected to develop a collaborative research program in conjunction with basic scientists and clinicians in the Department of Ophthalmology. Support for two years is guaranteed. Send curriculum vitae, summary of relevant research and/or representative publications and the names of three references by May 1, 1995, to: **Postdoctoral Fellow Search Committee, The Margaret M. Dyson Vision Research Institute, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** *Cornell University Medical College is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL FELLOWSHIP

Position available in cellular and molecular neurobiology for a Ph.D. or M.D./Ph.D. Research projects involve transgenic and gene targeting strategies to generate animal models of human neurodegenerative diseases, including Alzheimer's disease, ALS, and spinal muscular atrophy. Studies of the mechanisms of neuronal injury and cell death are integral to our program. A strong background in cellular and molecular biology and familiarity with neurobiology are desirable. Send curriculum vitae and references to: **Donald L. Price, M.D., Neuropathology Laboratory, The Johns Hopkins University School of Medicine, 558 Ross Research Building, 720 Rutland Avenue, Baltimore, MD 21205-2196.** *Please, U.S. citizens or permanent residents only (because of funding limitations). An Equal Opportunity Employer; women and minorities are encouraged to apply.*

**POSTDOCTORAL FELLOW**, University of California, San Francisco (UCSF). Postdoctoral position available immediately to study the molecular basis of central nervous system adaptation to ethanol. The specific project available focuses on mechanism of transcriptional regulation by ethanol. Goals include identification of ethanol-responsive transcriptional regulatory factors and signaling cascade(s) involved in ethanol action. Experience in molecular biology is required. Experience with transcriptional regulation and signal transduction is preferred. Applicants must have a Ph.D. in biochemistry, molecular biology or related field. Please send curriculum vitae, brief summary of research experience, and three letters of reference to: **Michael F. Miles, M.D., Ph.D., University of California, Department of Neurology, Building 1, Room 101, 1001 Potrero Avenue, San Francisco, CA 94110.** *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWSHIP** is available to study the molecular mechanisms of antidepressant action. The function and regulation of beta adrenoceptors and Type IV phosphodiesterase isozymes are currently being studied using antisense oligonucleotides, expression of recombinant proteins, and immunoblot procedures. Applicants should have a strong background in molecular biology. Send curriculum vitae and three reference letters to: **James M. O'Donnell, Ph.D., Pharmacology Department, LSU Medical School, 1501 Kings Highway, Shreveport, LA 71130.** *Louisiana State University Medical College is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS IN CANCER RESEARCH

The University of Rochester Cancer Center invites applications for **POSTDOCTORAL POSITIONS** in an NCI-supported research training program in the general areas of: Cell Growth and Regulation, Molecular Genetics, Experimental Therapeutics, and Immunology. Projects include mechanisms of oncogene function and metastasis, growth factor and hormonal regulation of gene expression, evasion of immune response by tumors, immunotolerance, disease modeling in transgenic mice, investigation of cell cycle regulation using flow cytometry, antitumor drug inhibition of cell growth, mechanisms of drug resistance, and control of DNA synthesis, repair, and protein synthesis in tumor viruses and cells. Please send résumé and three letters of reference to: **Dr. Russell Hilf, Training Program, University of Rochester Cancer Center, 601 Elmwood Avenue, Box 704, Rochester, NY 14642.** *U.S. citizenship or permanent residency required. The University of Rochester is an Equal Opportunity Employer.*

**POSTDOCTORAL/RESEARCH ASSOCIATE** position open to study the structure/function and functional plasticity of glutamate receptor/channels. Techniques used in our laboratory include Western blots, antisense oligonucleotides, immunocytochemistry, tissue culture, brain slices and patch clamping. Applicant should be experienced in electrophysiology. Salary commensurate with experience. Send résumé (including telephone number) to: **Dr. Margarita Curras, Department of Neuroscience, 1151 Batchelor Hall, University of California, Riverside, CA 92521.** *Equal Opportunity/Affirmative Action Employer.*

**RESEARCH FELLOWSHIP.** The focus is on mammalian stress genes involved in growth control and their regulation by factors particularly the tumor suppressor p53. Studies involve elucidation of their regulatory pathways and the functions of these genes. Salary is \$25,000 to \$42,000 per year based on zero to five years of postdoctoral experience. Experience in molecular biology or protein biochemistry. Send curriculum vitae and names of three references to: **Dr. A. J. Fornace Jr., Building 37/Room 5C09, NCI, NIH, Bethesda, MD 20892-4255.** *NIH is an Equal Opportunity Employer.*

**POSTGRADUATE POSITIONS** (two). One Postdoctoral and one Post-Master's position available immediately. Seeking personnel to assist in physiological modeling of primary production using remote sensing inputs at the global scale. Send letter of application, curriculum vitae, names, addresses, telephone numbers of three references by 20 April 1995 to: **Dr. Stephen Prince, Geography Department, University of Maryland, College Park, MD 20742-8225.** Email: **sp43@umail.umd.edu**; FAX: **301-314-9299.** *Women and minorities encouraged to apply.*

**GRADUATE ASSISTANTSHIP** at the Center for Fluorescence Spectroscopy (CFS). Position available for a highly motivated individual to complete his/her thesis within the CFS, resulting in a Ph.D. from the Department of Biological Chemistry (University of Maryland at Baltimore) or the Department of Chemistry (University of Maryland, Baltimore County). Students with some completed graduate coursework are encouraged to apply. Research will involve use of advanced fluorescence methods. Send résumé and letters of recommendation to: **Dr. Joseph R. Lakowicz, Department of Biochemistry, University of Maryland School of Medicine, 108 North Greene Street, Baltimore, MD 21201.**

### RESEARCH SCIENTIST

Position is immediately available to study HIV-1 and B cell lymphokine expression at the cellular and molecular levels. Specific requirements include strong background in molecular biology and cellular immunology of HIV-1. Excellent salary and fringe benefits. Send résumé, names and addresses of three references and salary requirements to:

**David Benjamin, M.D.  
1232 James Cancer Hospital and Research Institute  
The Ohio State University Hospitals  
300 West 10th Avenue  
Columbus, OH 43210-1228  
Telephone: 614-293-3716; FAX: 614-293-4372**



the perfect Environment

The South Florida Water Management District has an exceptional opportunity available:

## Water Quality Modeler

We are seeking a professional to be a part of a team developing models for understanding and predicting South Florida water quality dynamics. Immediate emphasis will be on regional-scale models, which includes the canal system and wetlands of the Everglades region. Minimum requirements include a PhD or M.S. and four years experience. Knowledge of empirical and mechanistic modeling approaches, statistics and programming is necessary. Excellent presentation and teamwork skills are a must. Publication of results in peer-reviewed journals is expected.

The South Florida Water Management District is located in a unique sub-tropical environment and provides challenging career opportunities and a competitive salary/benefit package. Candidates selected for interviews will present a seminar as part of the interview process. For further details, contact Tom Fontaine, Director, Everglades Systems Research Division, at (407)687-6551. To apply, send C.V., including names and phone numbers of 4 references and a statement of research or engineering interests to Linda Starr, Human Resources Division, SFWMD, Ref #SCLS7140, 3301 Gun Club Road, West Palm Beach, FL 33416.

## South Florida Water Management District

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

National Institutes of Health  
National Institute of General Medical Sciences  
Division of Minority Opportunities in Research

## HEALTH SCIENTIST ADMINISTRATOR GS-601-12/13/14

The position is in the Federal Civil Service with a salary range of \$43,356 - \$79,200.

The incumbent serves as a Health Scientist Administrator and staff specialist responsible for managing, advising, directing, and evaluating program activities for a portfolio of MARC and MBRS grant applications. In addition, the incumbent provides scientific expertise in specialized areas of biochemistry and advises grantees and professional staff members regarding research aspects of grants within these areas of expertise and serves as a source of technical knowledge.

Applicants interested in applying must have a knowledge of biology or chemistry with specific expertise in at least one of these areas: biochemistry, microbiology, organic chemistry, physiology, genetics, psychology or related areas, and of the experts in these areas of expertise; ability to make critical judgments about the management and evaluation of scientific research; ability to write about complex scientific topics for a varied audience; and knowledge of efforts/programs that are in higher education, business, professional organizations, or government, targeted at underrepresented minorities in the biomedical sciences.

For application package, qualification requirements and additional position information contact: **National Institute of General Medical Sciences, Personnel Office, 45 Center Drive - MSC 6200, Bethesda, MD 20892-6200, (301) 594-2749. TDD (301) 402-6327.**

Closing date April 10, 1995.

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



CDC in Atlanta Georgia, invites applications for the following position:

### Director, National Center for HIV, STD, and TB Prevention

The Director of this new center will provide leadership for national programs focused on the prevention and control of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), other sexually transmitted diseases (STD), tuberculosis (TB), and other related diseases. The center will be staffed with approximately 1000 employees who will provide program technical assistance and scientific leadership in such disciplines as behavioral science, epidemiology, statistics, and preventive medicine. The Director will plan, direct, and coordinate a national program for preventing the spread of HIV, STD, and TB; conducting national/international surveillance and behavioral, prevention, and epidemiologic studies to determine risk factors and transmission patterns and developing effective prevention strategies. The center will serve as the focus within the Public Health Service for national information and education activities involving these infections.

Qualifications include in-depth knowledge of public health prevention and control programs in HIV/AIDS/STD/TB and proven ability to provide administrative and scientific leadership for a multidisciplinary health program. A doctoral degree (M.D., Ph.D., or equivalent) is preferred. This Senior Executive Service position is in the career civil service with an annual basic salary range of \$97,229 to \$121,092. Public Health Service Commissioned Corps Officers are also eligible to apply. Physicians may be eligible for a comparability allowance of up to \$20,000 per year. Interested applicants may send their curriculum vitae and names of three professional references postmarked by May 1, 1995, to Nancy Peterson, Human Resources Management Office, Mailstop D01, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., Atlanta GA 30333. Tel. (404) 639-3614. This is a drug testing designated position and requires a background investigation for a security clearance. CDC is an Equal Opportunity Employer and provides a smoke-free work environment.

### Assistant Professor- Environmental Sciences

The Department of Environmental Sciences, Cook College, Rutgers-The State University of New Jersey, invites applications for a tenure track faculty position available July 1, 1995. The Department, which dates from 1920 has the largest undergraduate and one of the largest graduate enrollments in the college, and is expanding into additional laboratory and office space within its new building. The successful candidate will be expected to teach undergraduate and graduate courses, and develop a strong research program including external funding. Specialities may include but are not limited to biology, chemistry, engineering, microbiology, physics, or toxicology as applied to aquatic, atmospheric, environmental health, groundwater, radiological, soil, or waste treatment systems. The candidate must have a Ph.D. in a discipline related to environmental science; post-doctoral experience is desirable.

Please send a letter of application, a curriculum vitae, transcripts, a statement of research and teaching interest, and the names, addresses and telephone numbers of at least 3 references to: **Dr. Peter F. Strom, Chair, Environmental Sciences Search Committee, ENRSR; Cook College, Rutgers University; New Brunswick, NJ 08903-0231.** Review of applications will begin March 30 and will continue until a suitable candidate is selected.

Applicants who would add to the diversity of the faculty are especially encouraged to apply.

*Rutgers University is an Equal Employment Opportunity/Affirmative Action Employer.*

## Chemistry

### Chemist

This position requires BS/MS in chemistry with emphasis on organic chemistry with extensive experience in the practical application of organic chemistry. Hands on experience with NMR, GC, IR and HPLC techniques is required. Knowledge of polymer chemistry is helpful. 5+ years industrial experience is required. Good verbal and written communication skills is a must. Background in GMP and ISO is desirable.

### Production Chemist

This position requires a BS in Chemistry or equivalent with 3+ years experience in the batch chemical process industry. Pharmaceutical/biochemistry industry experience preferred. Knowledge of TQM techniques, cGMP and ISO a plus. Working knowledge of environmental and safety regulations for the industry a must.

For consideration, please send your resume to: Bio-Rad Laboratories, 2000 Alfred Nobel Dr., Dept. 293, Hercules, CA 94547. EEO/AA.

**BIO-RAD**

**Bio-Rad Laboratories**



## PRE- AND POST-DOCTORAL OPPORTUNITIES University of California, Davis

### NIEHS/Superfund Basic Research Program

This NIEHS supported program project has postdoctoral positions available immediately for one year with extension based upon availability of funding. This program is an interdisciplinary project consisting of 8 integrated projects and three research/service cores focusing on exposure, susceptibility and effect of hazardous materials on humans and their environment.

Dr. Alan Jackman (Chemical Engineering): Protein purification and characterization

Drs. Bill Lasley and James Overstreet (Institute of Toxicology and Environmental Health): Detection of adverse effects of reproductive toxicants

Dr. Prabhakara Choudary (Antibody Engineering): Phage display libraries; recombinant antibodies; baculovirus expression; microbial pathogens and toxins

Dr. Kate Scow (Soil Microbial Ecology): Application of molecular biological approaches in soil microbial ecology

Dr. A. Daniel Jones (Facility for Advanced Instrumentation): Mass spectrometric analysis of xenobiotics, metabolites and proteins

Dr. Bruce Hammock (Environmental Toxicology): Mechanism of action and immunochemical detection of toxins; biosensor development

Positions are available immediately and screening will begin April 21 and continue until all positions are filled. To apply, send or FAX a resume, three letters of reference, and indicate area of interest and date of availability to: Kathleen Dooley, UC Davis Superfund Program, Department of Entomology, University of California, Davis 95616 USA (916) 754-8879 (voice); (916) 752-1537 (FAX); superfund@ucdavis.edu

In addition graduate trainee positions are available to support interdisciplinary research on complex problems posed by hazardous waste sites. Areas of emphasis include toxicology, biochemistry and molecular biology, cell biology, environmental chemistry, environmental engineering and hydrologic science. For information please contact Ms. Dooley at the above address.

*The University of California is an Affirmative Action/Equal Opportunity Employer and applications from minorities and women are strongly encouraged.*



### FACULTY POSITION BEIRNE B. CARTER CENTER FOR IMMUNOLOGY RESEARCH UNIVERSITY OF VIRGINIA

The Beirne B. Carter Center for Immunology Research seeks applicants for a tenure track junior faculty position in immunobiology. We seek candidates with expertise and interest in the cell and molecular biology of cytokine expression and cytokine receptor signaling, cell adhesion molecules, or in lymphocyte development. Applicants should have postdoctoral experience and are expected to develop a strong independent research program. Some teaching in graduate and medical courses will also be expected.

Current areas of research interest among Beirne B. Carter Center for Immunology Research faculty include Antigen Processing and Presentation, MHC and Antigen Receptor Structure, Lymphocyte Activation, Autoimmunity and Allergy, and the Immunology of Infectious Diseases. The University of Virginia provides excellent research facilities in an exceptional locale. Centers for research in Cancer Biology, Molecular Biology and Cell Signaling, Retrovirus and AIDS, and Cardiovascular Physiology are present on campus. Beirne B. Carter Center for Immunology Research faculty are actively encouraged to collaborate with faculty in these related disciplines.

Applicants should send a curriculum vitae, a summary of present and future research interests, and the names of 3 referees. Completed applications should be sent to:

Dr. Thomas J. Braciale  
c/o Administrator  
Beirne B. Carter Center for Immunology Research  
University of Virginia  
MR4/Box 4012 Health Sciences Center  
Charlottesville, VA 22908

*The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.*

### ASSOCIATE PROFESSOR

The Department of Pharmacology at the University of Texas Health Science Center in San Antonio (UTHSCA) invites applicants for a **TENURE-TRACK POSITION** as an Associate Professor. The successful candidate will be an established investigator with a strong, active research program using molecular and/or cellular approaches to study receptors, receptor-mediated signal transduction pathways, protein trafficking, or neurotrophic factors. Salary, space and start-up funds are competitive with national levels. The Department is expanding and committed to building new programs, particularly those with a central nervous system orientation. Please send a curriculum vitae, synopsis of research plans and the names of three individuals to provide recommendations to: **Dr. Alan Frazer, Chairman, Department of Pharmacology, UTHSCA, 7703 Floyd Curl Drive, San Antonio, Texas 78284-7764.** *The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR

The Department of Pharmacology at the University of Texas Health Science Center in San Antonio (UTHSCA) invites applicants for **TENURE-TRACK POSITIONS** at the level of Assistant Professor available September 1, 1995. The successful candidate will be capable of using multiple approaches to carry out research in any of the following areas: (1) peptide hormone receptor systems; (2) Ca<sup>++</sup> binding proteins; (3) protein trafficking; (4) protein phosphorylation; (5) ligand-gated ion channels; or (6) growth and development. Evidence of originality, scientific accomplishment and the ability to develop an independent research program is essential. Start-up support will be provided. Candidates should send their curriculum vitae, a synopsis of their current and future research plans, and the names of three individuals to provide recommendations to: **Dr. Alan Frazer, Chairman, Department of Pharmacology, UTHSCA, 7703 Floyd Curl Drive, San Antonio, Texas 78284-7764.** *The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.*

### BIOLOGY TRAINING COURSE IN ANTARCTICA (3rd YEAR) "Biological Adaptations of Antarctic Marine Organisms"

This National Science Foundation sponsored course will be held in Antarctica at the United States' McMurdo Station from January 4, 1996 to February 4, 1996. The emphasis of the course will be on laboratory-based experimental Antarctic biology, with an introduction to field collection operations. A diverse teaching faculty will offer students the possibility of working on a wide range of antarctic organisms (bacteria, algae, invertebrates, and fish) and the possibility of working at several levels of analysis (molecular biology to whole organism). The specific themes for the 1996 course include: temperature adaptation, UV-photobiology, protein biochemistry, and membrane physiology (Lynda Goff, Univ. of California, Santa Cruz; Deneb Karentz, Univ. of San Francisco; Donal Manahan, Univ. Southern California; George Somero, Oregon State Univ.). This is an international course, open to all nationalities. Applications are invited from graduate students, postdoctoral fellows, and other research scientists who are interested in the biology of antarctic organisms. The 1996 course will accommodate 16-18 students. Full scholarships are available to each student accepted into the course to cover the cost of travel from home institution to Antarctica and room and board while in Antarctica. Deadline for completed applications at Antarctic Support Associates is June 15, 1995. To obtain an application form write to: Director, Science Support, Attn. McMurdo Biology Course, Antarctic Support Associates, 61 Inverness Drive East, Suite 300, Englewood, Colorado 80112, USA (Phone: 303-790-8606; FAX: 303-790-9130; email: antarctic\_biocourse@asa.org).

Antarctic Support Associates

### Saint Louis University School of Medicine

#### Professor and Chairperson Department of Pathology

Saint Louis University School of Medicine is accepting nominations and applications for the position of Chairperson, Department of Pathology. The Department serves a 360 bed, University-owned tertiary care hospital (Saint Louis University Hospital), an adjacent 190 bed children's hospital (Cardinal Glennon Children's Hospital), and the St. Louis VA Medical Center (John Cochran VA Hospital). Educational and research activities of the Department are well established. Candidates must have a record of excellence in academic pathology with experience in research and administrative affairs.

Nominations and applications should be addressed to:

Bruce R. Bacon, M.D.  
Chairperson  
Pathology Search Committee  
Saint Louis University  
School of Medicine  
1402 South Grand Boulevard  
St. Louis, MO 63104

*Saint Louis University is an  
Equal Opportunity Employer  
M/F/D/V*

National Institutes of Health / National Institute on Drug Abuse

## DIRECTOR, DIVISION OF INTRAMURAL RESEARCH

Location: Baltimore, Maryland

The National Institute on Drug Abuse (NIDA) invites nominations and applications for this senior scientific position located in Baltimore, Maryland.

The Director of NIDA's Division of Intramural Research is responsible for the direction of the largest single research center in the world dedicated to basic biomedical and clinical research on drug abuse and addiction. Located on the Hopkins Bayview Campus, the program includes substantial resources and is comprised of several large multi-disciplinary preclinical laboratories and clinical research programs that include both inpatient and outpatient facilities.

Desirable qualifications include an M.D. or Ph.D. degree with extensive postgraduate research experience; and experience in the scientific and administrative management of research programs which has established the candidate as an authority in preclinical or clinical research approaches in the neurosciences or other biomedical or behavioral sciences.

Salary will be negotiated within the allowable limits established by law. Copies of the vacancy announcement may be obtained by calling the NIDA Personnel Management Branch on (301) 443-9593. Applicants must submit one of the following documents: (1) a resume/curriculum vitae and bibliography; or (2) a Federal employment application (SF-171, or OF-612). In addition, applicants are encouraged to submit a narrative related to the qualification requirements listed in the vacancy announcement.

Submit complete application materials by May 15, 1995, to:

**NIDA Personnel Management Branch  
Attention: Ms. Maryann Pafitis  
5600 Fishers Lane, Room 10-21  
Rockville, Maryland 20857**

All qualified candidates will receive consideration without regard to race, color, age, religion, gender, national origin, political affiliation, sexual orientation, marital status, union membership or disability.

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## SENIOR PATENT COUNSEL

The mission of Human Genome Sciences is to identify and develop drugs and diagnostic products based on its leadership in the discovery and expression of novel genes from human and animal origin.

This position will report directly to the General Counsel and will assume direct responsibility for managing outside counsel on patent and trademark activities. Other responsibilities will include participation in improving an evolving worldwide patenting strategy, drafting new original applications and responses, supervising US, PCT and foreign national phase filings and patent prosecution, and preparing patentability and infringement analysis and opinions.

The qualified candidate will possess a Ph.D. in molecular biology, biochemistry, or equivalent. A minimum of 5 years experience in biotechnology patent law is required. Must be licensed by USPTO and by one or more state bars.

For immediate consideration, please send your curriculum vitae to **Human Resources Department, Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD 20850, FAX (301) 309-1845.** An Equal Opportunity Employer.



**Human Genome Sciences, Inc.**

*Dedicated To Discovery For Health*

## STAFF SCIENTIST Genetic Systems

*Stratagene, with over 200 employees, is located in a very attractive part of La Jolla, California. Known for our innovative, high quality products for cutting edge research, we are expanding our program in the area of genetic systems.*

*The successful candidate will have a postdoctoral and/or industrial experience with expertise in one or more of the following areas:*

- Eukaryotic gene expression
- Protein expression
- Yeast two-hybrid screening
- Viral Vectors

*We offer an excellent salary and benefits package. Candidates interested in joining a highly successful, progressive company with room to grow are encouraged to submit resume to: **Stratagene, Attn: Professional Staffing 21014-95R, 11011 N. Torrey Pines Rd., La Jolla, CA 92037. AA/EOE.***



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## **FOUNDING DEAN**

### ***Faculty of Dentistry***

Kuwait University takes pleasure in inviting candidates for the position of Dean of the College of Dentistry.

New Colleges of Dentistry and Pharmacy are currently in the design phase by a consortium of internationally recognized architects from the United States and Kuwait. These new Colleges will join existing Colleges of Medicine and Allied Health Sciences and Nursing as integral parts of the University Health Sciences Center located on the Jabriyah campus which also includes the Mubarak Al Kabeer Hospital, a major teaching and medical facility of the Ministry of Public Health.

The expected opening of the state-of-the-art Dental and Pharmacy Colleges is planned for the fall semester of 1998.

The position of Dean also carries the academic rank of Professor and candidates for these position must meet and satisfy the criteria of Professor at the University of Kuwait.

Additional requirements for appointment include that the applicants should possess a Ph.D. and/or the equivalent in their special fields. The professional qualifications should include published research. A knowledge of academic management and administrative procedures at the dean's level is preferred, and, a combined experience in higher education of 10-15 years, 3-4 of which as Professor.

The conditions of appointment are:

Salary and benefits upon request.

Sixty (60) days of paid annual leave, a paid conference each year, gratuity, furnished accommodation, electricity and water free of charge, and free Medical care. In addition, free first class annual round trip air tickets to country of citizenship or permanent residence are provided along with education for three (3) dependent children in Kuwait from elementary through high school. There is no taxation and currency is transferable without restriction.

Applications should include a letter of intent, two (2) copies of your curriculum vitae, the names and addresses of three (3) references. Review of applications will begin February 1, 1995, and continue until the position is filled.

Applications should be sent to:

**Dr. Basil Al-Nakib**  
**Professor and Vice President of Health Sciences**  
**Kuwait University**  
**P.O. Box 24923**  
**13110 KUWAIT, Arabian Gulf**  
**Fax: 965 533 0472**



## CAREER OPPORTUNITIES

Pfizer Inc. is a Fortune 100 leader in pharmaceutical research and health care products. Continued growth provides research opportunities for holders of BS/MS/PhD (or the equivalent) in the following disciplines:

### FOOD SCIENCE/NUTRITION ORGANIC CHEMISTRY ANALYTICAL CHEMISTRY

In addition to a stimulating research environment, we offer a competitive compensation and benefits package, including relocation assistance to our southeastern shoreline community. Please submit resume suitable for electronic scanning, i.e., eliminate italics, bullets, bolds, underlines and staples, laser printed preferred. **Send to Employee Resources, AD #1012, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.**

*We are an equal opportunity employer. M/F/D/V*

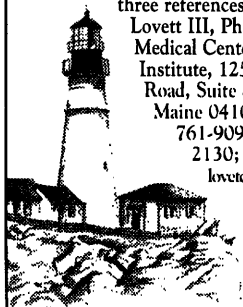


Central Research

## INVESTIGATOR IN VASCULAR WALL BIOLOGY

The Maine Medical Center Research Institute is accepting applications for a research scientist to serve as the basic science investigator in research projects of the Cardiovascular Surgery Service. The individual will be expected to join a research program with emphasis on vascular wall biology and pathology, with particular interest in atherosclerosis and intimal hyperplasia. The successful candidate will, in addition to performing his/her individual research, collaborate with other members of the Department of Surgery and assist in mentoring surgical research fellows. Applicants should have an M.D. or a Ph.D. in a biological science and three years of postdoctoral experience in cell or molecular biology.

Interested candidates should send their curriculum vitae and names and addresses of three references to: Edmund J. Lovett III, Ph.D., Director, Maine Medical Center Research Institute, 125 John Roberts Road, Suite 8, South Portland, Maine 04107; Phone (207) 761-9090; FAX (207) 761-2130; eMail [lovettc.mmcri@office.mmc.org](mailto:lovettc.mmcri@office.mmc.org).



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MAINE MEDICAL CENTER

In Portland

# Are you at the forefront of science?

**At Hewlett-Packard's Bioscience Products Organization in Palo Alto, California**, our investment in Research & Development is one of the highest among Fortune 500 companies. Currently, we are seeking creative, motivated Research & Product Development professionals who are interested in expanding the boundaries of technology.

## Nucleic Acid Chemist

This position will involve research into improving methods for the synthesis of modified nucleotides and their enzymatic incorporation into oligonucleotides and leading a multidisciplinary team developing instrumentation for characterizing nucleic acids.

Requires a PhD in Chemistry or Biochemistry along with at least 3 years' experience in the synthesis of modified nucleosides and nucleotides, the development of novel methods for the chemical synthesis of oligonucleotides, and techniques for the isolation and quantification of nucleic acids including HPLC, capillary electrophoresis, and PAGE along with scientific team leadership. Experience in multi-step organic synthesis non-radioactive methods for the detection and analysis of DNA and RNA, and enzymatic synthesis of nucleic acids a must. Familiarity with hybridization kinetics and nucleic acids amplification techniques, and experience with industrial product development are preferred. **Ad #1485**

## Nucleic Acid Enzymologist

This position will involve research in the substrate recognition requirements of various RNA and DNA polymerases. You will develop high yield, high fidelity methods for the incorporation of modified nucleotides into oligonucleotides and develop analytical methods for their analysis, as part of a multidisciplinary team developing instrumentation for characterizing nucleic acids.

Requires a PhD in Biochemistry with at least three years' experience in the following: enzymatic synthesis of RNA or DNA, nucleic acid amplification techniques, nonradioactive methods for the detection and analysis of RNA and DNA, and isolation and characterization of duplex and single stranded oligonu-

cleotides. Research experience in the molecular recognition involved in substrate binding to polymerases a must. Preferred backgrounds include knowledge of gene databases, hybridization kinetics, and techniques used to characterize diagnostic gene sequences, as well as experience with buffer and metal ion effects on duplex structures, and the manipulation and characterization of chemically modified oligonucleotides. **Ad #1486**

## Physical Organic/Organic Synthetic Chemist

This position involves the development and optimization of fluorescent dye conjugates amenable to efficient enzymatic incorporation into nucleic acids. You will work on a team with molecular biologists, biochemists and engineers to develop quantitative nucleic acid assay instrumentation.

Requires a PhD in Organic Chemistry along with at least three years' experience with the synthesis/modification of luminescent dyes for the detection of nucleic acids and the synthesis of dye-base conjugates for nucleic acid incorporation. Knowledge of nucleotide/nucleoside chemistry, the enzymatic synthesis of DNA and RNA, and the photo-physics/chemistry of luminescent dyes are essential. Broad backgrounds in organic synthesis, experience in reagent development for bio-instrumentation, knowledge of bio-analytical techniques for nucleic acids, and experience in a multidisciplinary R&D environment preferred. **Ad #1487**

Hewlett-Packard Company offers a competitive salary and benefits package. To apply for these **Palo Alto openings**, please send your resume to: **Hewlett-Packard Employment Response Center, Attn: Ad # (insert ad number of interest), 3000 Hanover Street, MS 20AZ, Palo Alto, CA 94304-1181.**

Hewlett-Packard Company is an equal opportunity employer dedicated to affirmative action and work force diversity.



**HEWLETT®  
PACKARD**

## THE NEUROSCIENCES INSTITUTE

La Jolla, California

THE NEUROSCIENCES INSTITUTE (NSI) IS AN INDEPENDENT, not-for-profit organization at the forefront of research on the brain. The NSI, located on the campus of The Scripps Research Institute in La Jolla, is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

### FELLOW IN THEORETICAL NEUROBIOLOGY

**A**PPPLICATIONS ARE INVITED FOR POSITIONS AS FELLOW IN Theoretical Neurobiology. Since 1987, the NSI has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and detailed formulations of biologically based models of perceptual systems. Fellows will have daily opportunities to interact with NSI's Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral or assistant professor level with strong backgrounds in theoretical or experimental neuroscience or related fields. Positions are now available.

Fellows will receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: *Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 3377 North Torrey Pines Court, Suite 310, La Jolla, California 92037.*

## GLOBAL CAREER OPPORTUNITIES



## MOLECULAR BIOLOGIST

### (Protein Expression)

AMRAD Natural Products Pty Ltd has recently been established as a wholly owned subsidiary of AMRAD, one of Australia's leading R&D-based pharmaceutical companies. This important new initiative in the development of the Australian Pharmaceutical Industry will research target-driven drug discovery in a wide range of therapeutic areas by natural products screening. The Company is based in Melbourne in newly refurbished laboratories offering top quality facilities and equipment.

Possessing a Ph.D in molecular biology and several years post-doctoral experience you will have broad hands-on experience in expression of proteins in both eukaryotic and prokaryotic systems. As part of a dynamic research team you will be responsible for optimising expression of relevant molecular targets, preparing target proteins and constructing recombinant mammalian cells for functional analysis of lead compounds that will be identified.

An excellent salary package is offered and where appropriate assistance with relocation will be offered.

For a confidential discussion about this exciting opportunity, call **Dr Amanda Reid** on (61 3) 654 8034 or write/fax your details to:

**Daryl Alexander & Associates**  
Level 4, 282 Collins Street,  
Melbourne Victoria, Australia 3000  
Fax: (61 3) 654 1481



## GLOBAL CAREER OPPORTUNITIES

### THE UNIVERSITY OF THE WEST INDIES St. Augustine, Trinidad

Applications are invited for the following posts in the Faculty of Medical Sciences:

#### SENIOR LECTURER/LECTURER IN ORTHOPAEDIC SURGERY

Applicants should have experience of higher education and at least five years postgraduate experience.

#### SENIOR LECTURER/LECTURER IN COMMUNITY HEALTH

Applicants should have postgraduate qualifications (MPH an advantage).

#### LECTURER/ASSISTANT LECTURER IN PSYCHIATRY

Applicants should have FRCP(C), MRC(Psych) or equivalent and three years experience in Psychiatry after their basic medical qualification.

#### LECTURER/ASSISTANT LECTURER IN OBSTETRICS & GYNAECOLOGY

The appointee will be attached to the Women's Hospital, Mount Hope.

**ANNUAL SALARY RANGES** (Medical): Senior Lecturer TT\$106,968 - TT\$115,224 (B) - TT\$126,144; Lecturer TT\$78,624 - TT\$86,880 (B) - TT\$100,824; Assistant Lecturer TT\$65,412 - TT\$69,540. An Institutional Allowance ranging from 10% to 30% of basic salary depending on post is also payable. **Annual Special Allowance:** Lecturer Below Bar TT\$1,680; Above Bar TT\$3,024; Senior Lecturer TT\$4,680. (£1 = TT\$8.96; US\$1 = TT\$5.99). Passages, Pension, Housing Allowances, Study and Travel and Book Grants.

Applications naming three referees and detailing qualifications and experience should be sent to the Registrar, The University of the West Indies, St Augustine, Trinidad as soon as possible. Further particulars will be sent to all applicants and are also available from the Appointments Department, Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK (tel. 0171 387 8572 ext. 206; fax 0171 813 3055; email appts.acu@ucl.ac.uk).

### The MAX-PLANCK-INSTITUTE FOR DEVELOPMENTAL BIOLOGY

in Tübingen

invites applications for the position of a  
**RESEARCH GROUP LEADER**

from young scientists who have already achieved recognition in

#### Developmental Neurobiology

The successful applicant will be expected to conduct a vigorous, original and independent research programme.

The position is for 5 years and roughly equivalent to an Assistant Professorship (US) or University Lectureship (UK). There is no teaching commitment.

The group will have modern laboratory facilities, an appropriate operating budget, and funding for co-workers.

Applications, including curriculum vitae, list of publications, and a description of scientific achievements and future research plans, should be submitted until

**May 15, 1995**

to:

**Prof. Dr. Friedrich Bonhoeffer**  
Max-Planck Institute für Entwicklungsbiologie  
Spemannstraße 35  
72076 Tübingen, FRG.



# WORK TO HELP PEOPLE WHO ARE ANXIOUS, FORGETFUL AND DEPRESSED.



## MOLECULAR BIOLOGIST (NEUROSCIENCE)

We're working to conquer mental illness. Anxiety for instance, depression, Alheimers disease, schizophrenia, stroke and other brain disorders. By doing so, we'll improve the lives of not only the sufferers, but also their families and friends.

There's no doubt it's a rewarding field - there are, after all, more advances to be made here than in any other medical area. And it's one to which we're totally dedicated.

Our purpose-built Neuroscience Research Centre near Harlow, Essex, is one of the largest such facilities in the pharmaceutical industry. The focus of all our neuroscience research, it features technically advanced laboratories designed to our scientists' own specifications. Its multidisciplinary approach - involving teams of the finest chemists, biochemists, pharmacologists and molecular biologists in their field - is equally forward thinking.

The application of molecular biology is vital to our research. To make an effective contribution within our well established molecular biology group, you should have a PhD and post-doctoral experience in molecular cloning and/or transgenics. A keen interest in neuroscience and molecular pharmacology is also essential.

The rewards are everything you would expect from one of the largest research based pharmaceutical companies in the world. As well as a superb working environment and challenging projects, you can look forward to an excellent salary and benefits which feature private health care, life assurance, an on-site childcare facility and relocation to a site that's just 30 minutes by train from both London and Cambridge.

Find out more about who you could be working for, and working with. Write, enclosing your CV, to: The Personnel Manager, Merck Sharp & Dohme Research Laboratories, Terlings Park, Eastwick Road, Harlow, Essex CM20 2QR, England.



### MERCK SHARP & DOHME

Neuroscience Research Centre Dedicated to Innovation



**Kuwait Foundation**  
for the Advancement of Sciences



مؤسسة الكويت للتقدم

## KUWAIT PRIZE 1995 Invitation to Nominations

The **Kuwait Prize** was institutionalized to recognize distinguished accomplishments in the arts, humanities and sciences. The Prizes are awarded annually in the following categories:

- A. Basic Sciences
- B. Applied Sciences
- C. Economics and Social Sciences
- D. Arts and Letters
- E. Arabic and Islamic Scientific Heritage

The Prizes for 1995 will be awarded in the following fields:

- |  |  |
|--|--|
| A. Basic Sciences:                         | Mathematical Statistics  |
| B. Applied Sciences:                       | Allergy  |
| C. Economics and Social Sciences:          | Energy and Development in the Gulf Cooperation Council Countries |
| D. Arts and Letters:                       | Theatre and the Arab Social Issues.                              |
| E. Arabic and Islamic Scientific Heritage: | Chemistry and Pharmacology                                       |

### Foreground and Conditions of the Prize:

1. Two prizes are awarded in each category:

- \*A Prize to recognize the distinguished scientific research of a Kuwaiti, and,
- \*A Prize to recognize the distinguished scientific research of an Arab citizen.

2. The candidate should not have been awarded a Prize for the submitted work by any other institution.
3. Nominations for these Prizes are accepted from individuals, academic and scientific centres, learned societies, past recipients of the Prize, and peers of the nominees. No nominations are accepted from political entities.
4. The scientific research submitted must have been published during the last ten years.
5. Each Prize consists of a cash sum of K.D. 30,000/- (approx. U.S.\$100,000/-), a Gold medal, a KFAS Shield and a Certificate of Recognition.
6. Nominators must clearly indicate the distinguished work that qualifies their candidate for consideration.
7. The results of KFAS decisions regarding selection of winners are final.
8. The papers submitted for nominations will not be returned regardless of the outcome of the decision.
9. Each winner is expected to deliver a lecture concerning the contribution for which he was awarded the Prize.

Inquiries concerning the Kuwait Prize and nominations including complete curriculum vitae and updated lists of publications by the candidate with four copies of each of the published papers should be received before **31/10/1995** and addressed to:

**The Director General  
The Kuwait Foundation  
for the Advancement of Sciences**  
P.O. Box: 25263, Safat - 13113, Kuwait  
Tel: + 965 2429780 / Fax: + 965 2403891 /  
Telex: 44160 KEFAS

## Contemporary Challenges in Carbohydrate Chemistry



The First Michigan Symposium on  
Contemporary Challenges  
in Molecular Medicine



speakers....

Professor Samuel Danishefsky  
*Columbia University*  
Professor Chi-Huey Wong  
*The Scripps Research Institute*  
Professor Bertram Frasier-Reid  
*Duke University*  
Professor Daniel Kahne  
*Princeton University*

moderated by...

Dr. James A. Bristol  
Vice-President, Chemistry  
*Parke-Davis Pharmaceutical Research*

**April 28, 1995, 9 am - 4 pm**  
1800 Chemistry Building  
University of Michigan

No Registration Required

contact: Dr. Anthony Czarnik, (313) 996-5246, czarnia@aa.wl.com

PARKE-DAVIS  
UNIVERSITY OF MICHIGAN

### Health Care Research:

## Women

Every year, **SCIENCE** has devoted an issue to women in science. On 11 August 1995, we will take an in-depth look at a topic that has received a lot of attention: women's health. In this important cover story, **SCIENCE** goes beyond the popular myths and the rhetoric to examine the important questions surrounding this topic.

This is an excellent opportunity to showcase your company as an ideal work environment for women and to confirm your company's commitment to women's health care research by placing a full page recruitment advertisement in this issue. Full page advertisements will receive extra visibility by being listed on an index attached to the covers of the issues distributed to the Association for Women in Science. In addition, full page recruitment ads will be grouped together in the issue and highlighted by an advertisement listing all of the full page advertisers and saluting industry efforts to promote women in science and women's health care issues.

Don't miss this outstanding opportunity to feature your company's recruitment message in this once-a-year special issue!

"Health Care Research: Women" publishes 11 August 1995.  
Advertising space reservation deadline: 25 July 1995.

For advertising information, please call  
Janis Crowley at (212) 496-7704  
or fax to (202) 682-0816.

**SCIENCE**

**ASSOCIATE PROFESSOR  
ENVIRONMENTAL AND OCCUPATIONAL HEALTH**

The Department of Environmental and Occupational Health of the University of Pittsburgh is charged with providing mechanistic information necessary for the identification and assessment of health risks resulting from human, environmental and occupational exposures. The Department is seeking an individual for the tenure stream at the Associate Professor level with expertise in mechanisms of disease causation by non-genotoxic agents with emphasis on carcinogenesis. Preference will be given to candidates with additional expertise in other areas of the environmental sciences.

The successful candidate is expected to develop a high quality independent research program and to interact with colleagues in related areas of research. Responsibilities include the instruction of graduate and post-doctoral students.

Starting Date: July 1, 1995

Salary commensurate with experience.

The Department of Environmental and Occupational Health of the University of Pittsburgh is an expanding multi-disciplinary department with an emphasis on the mechanistic basis of disease resulting from human exposure to toxicants and quantification of the risk of exposure.

Candidates with at least three years of post-doctoral experience and an outstanding record of productivity are encouraged to submit a curriculum vitae, statement of interest and the names of at least six references to:

**John Barranger, M.D., Ph.D.**  
Chair, Search and Appointment Committee  
Department of Human Genetics  
Graduate School of Public Health  
University of Pittsburgh  
130 DeSoto Street  
Pittsburgh, PA 15261

Applications will be accepted until June 1, 1995.

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

**JPL/NASA Visiting Senior Scientist  
Life and Biomedical  
Sciences and Applications Division**

The Jet Propulsion Laboratory is seeking a Visiting Senior Scientist for the Division of Life and Biomedical Sciences and Applications Division within the office of Life and Microgravity Sciences and Applications at NASA Headquarters. The successful applicant will (I) assist in the advanced planning of the Space Biology Program, (II) help plan the biological research program to be carried out on Space Station, and (III) work with the international community to develop an integrated program in space plant biology. A PhD (or equivalent research experience in biology) is required. Applicants should have a broad and deep background in Biology with special strength in Plant Biology. For more information about the scope of the program and position responsibilities, please contact Dr. Frank M. Sulzman, at the NASA Life and Biomedical Sciences and Applications Division (202) 358-0220.

Tenured faculty members are the preferred choice although qualified individuals from non-profit research institutions may also be considered. These positions are open for immediate filling. Normal assignment in the Visiting Senior Scientist Program does not exceed two years. Appointees must be U.S. Citizens or Permanent Residents and are expected to return to their home institution following the NASA assignment. Please provide Curriculum Vitae, bibliography and the names of four references to:

Dr. Fredrick H. Shair  
Jet Propulsion Laboratory  
4800 Oak Grove Drive, MS 183-900  
Pasadena, CA 91109  
(819) 354-8251

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**JPL**  
Jet Propulsion Laboratory  
California Institute of Technology

**Department of Energy  
Human Genome Program Announcement**

Program Notice 95-15: Human Genome Program - Ethical, Legal, and Social Implications

**ACTION:** Notice inviting grant applications

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

The DOE is also soliciting applications for the preparation and dissemination of educational materials in any appropriate medium that will enhance public understanding of both the scientific aspects and the ethical, legal, and social aspects of the HGP. In addition, the DOE is encouraging applications for the support of conferences focusing on specific issues or areas of concern related to the ethical, legal, and social implications of the HGP. This may include (but is not limited to) implications of advances in the genetic characterization of complex traits and diseases. Educational and conference applications should also demonstrate awareness of the relevant literature, and include detailed plans for the accomplishment of project goals, including, where appropriate, video productions. In the case of applications that propose the production of series for broadcast, audiovisuals or other educational materials, the DOE strongly recommends that samples of previous similar work by the producers and writers be submitted along with the application. In the case of educational activities, the DOE strongly recommends inclusion of assessments of effectiveness of the proposed activities. In the case of all conferences, a fairly detailed and complete roster of committed speakers is necessary. At the completion of the conference, a summary or report is required. Educational and conference applications must also demonstrate awareness of the need to reach the widest appropriate audience.

**PREAPPLICATIONS:** Potential applicants are strongly encouraged to submit a brief preapplication, in accordance with 10 CFR 600.10(d)(2), that consists of two to three pages of narrative describing the research project objectives and methods of accomplishment. These will be reviewed relative to the scope and research needs of the DOE's Human Genome Program. Preapplications referencing Program Notice 95-15 should be received by April 13, 1995, and sent to Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), Washington, DC 20585. For express deliveries, address to Dr. Daniel Drell (telephone 301/903-6488), 19901 Germantown Road, Germantown, MD 20874. Address submissions by electronic mail to genome@er.doe.gov (in ASCII text please). Telephone and FAX numbers are required parts of the preapplication, and electronic mail addresses are desirable. A response to the preapplications discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt.

**SUPPLEMENTAL INFORMATION:** It is anticipated that approximately \$700,000 will be available for grant awards in this area during FY 1996, contingent upon availability of appropriated funds. Multiple-year funding of grant awards is expected, and is also contingent upon availability of funds. Previous awards have ranged from \$60,000 per year up to \$500,000 per year with terms from one to three years; most awards average about \$200,000 per year for two to three years. Similar award sizes are anticipated for new grants. Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the Application Guide for the Office of Energy Research Financial Assistance Program and 10 CFR part 605. The Application Guide is available from the U.S. Department of Energy, Office of Health and Environmental Research, Health Effects And Life Sciences Research Division, ER-72 (GTN), Washington, DC 20585. Telephone requests may be made by calling (301) 903-6488. As part of its grant regulations, ER requires in 10 CFR 605.11(b) that a grantee funded by ER and performing research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules shall comply with the National Institutes of Health "Guidelines for Research Involving Recombinant DNA Molecules" (51 FR 16958, May 7, 1986) or such later revision of those guidelines as may be published in the **Federal Register**.

The dissemination of materials and research data in a timely manner is essential for progress towards the goals of the DOE Human Genome Program. The OHER requires the timely sharing of resources and data. Applicants should, in their applications, discuss their plans for disseminating research results and materials that may include, where appropriate, publication in the open literature, wide-scale mailings, etc. Once OHER and the applicant have agreed upon a distribution plan, it will become part of the award conditions. Funds to defray the costs of disseminating results and materials are allowable; however, such requests must be sufficiently detailed and adequately justified. Applicants should also provide timelines projecting progress toward achieving proposed goals.

**DATES:** Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., July 13, 1995, to be accepted for merit review in September 1995, and to permit timely consideration for award in Fiscal Year 1996.

**ADDRESSES:** Formal applications referencing Program Notice 95-15 should be forwarded to: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Management Division, ER-64 (GTN), Washington, DC 20585, ATTN: Program Notice 95-15. The following address must be used when submitting applications by U.S. Postal Service Express Mail or any commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874.

**FOR FURTHER INFORMATION CONTACT:** Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, DC 20585, (301) 903-6488.

**FROM:** Federal Register, Monday, March 13, 1995, Vol. 60, No. 48, 60 FR 13433. "Energy Research Financial Assistance Program Notice 95-15: Human Genome Program-Ethical, Legal, and Social Implications"

**Mayo  
Clinic**

**Rochester  
Minnesota**



### PROGRAM IN MOLECULAR MEDICINE

The Mayo Foundation announces a major initiative in the area of molecular medicine, including expansion of programs in molecular genetics and gene therapy. This program will involve laboratory research, education and clinical practice. It is intended to bring together basic scientists and clinicians working toward medically important goals of genetic diagnosis and therapy of disease.

Seven new tenure-track faculty positions are available with associated laboratory space, equipment, start-up funds, and ongoing institutional support. Additionally, the program will incorporate the laboratories of individual Mayo scientists and clinicians currently working in this area and resources within the recently renovated General Clinical Research Center. The ten Mayo Research Core Facilities will be accessible to the program, and Mayo's extensive patient population base and clinical investigative expertise will play an integral role in this endeavor.

Mayo Foundation is fully committed to the establishment and ongoing success of this program. Positions are available for individuals with an M.D. and/or Ph.D. degree who have a strong interest in/commitment to the clinical application of human gene therapy, or basic disciplines such as molecular virology, vector development, and gene mapping/linkage analysis which are relevant to gene therapy. Appointments at all academic levels will be considered.

Interested applicants are asked to submit curriculum vitae, bibliography, statement of research interests, and names of three references to:

Laurence J. Miller, M.D.  
Molecular Medicine Search Committee  
Mayo Clinic and Foundation  
1701A Guggenheim Building  
200 First Street SW  
Rochester, MN 55905

*Mayo Foundation is an affirmative action and equal opportunity educator and employer.*

### HEAD, ARCTIC SCIENCES SECTION NATIONAL SCIENCE FOUNDATION Arlington, VA 22230

NSF's Office of Polar Programs seeks qualified candidates for the position of Head, Arctic Sciences Section. The incumbent will provide management and direction to the Section which supports multidisciplinary and interdisciplinary scientific research programs encompassing the natural sciences, the social sciences, and the Arctic Systems sciences.

Appointment to this Senior Executive Service position may be on a career or a 2 to -3 year limited term basis, with an ES-1 (\$97,991) to ES-3 (\$107,379) salary range. Applicants must have a Ph.D. or professional experience in the physical, environmental, social or natural sciences; substantial research experience; demonstrated familiarity with U.S. Arctic program activities and supervisory skills.

Applicants should contact George Pittmon, Jr. on 703-306-0755 (hearing impaired individuals may call TDD 703-306-0189) to request announcement EP 95-9 for complete qualification requirements and application procedures. Please specify appointment type(s) in which interested. Applications should be mailed to George Pittmon, Jr., National Science Foundation, Executive Personnel and Development Branch, Suite 315, 4201 Wilson Boulevard, Arlington, VA 22230. Applications must be received by April 28, 1995.

**NSF IS AN EQUAL OPPORTUNITY  
EMPLOYER COMMITTED TO  
EMPLOYING A HIGHLY QUALIFIED  
STAFF THAT REFLECTS THE  
DIVERSITY OF OUR NATION**

### POSTDOCTORAL AND RESEARCH ASSOCIATE POSITIONS

The Gene Therapy Program at the City of Hope National Medical Center and the Beckman Research Institute is an active and expanding, NIH funded program with areas of interest focusing on both the basic and clinical sciences. In each of the following opportunities, we will give preference to those able to commit to at least 2 years in the laboratory.

**POSTDOCTORAL POSITION:** We are seeking a scientifically rigorous, highly motivated/productive individual with a Ph.D. and/or an M.D. Experience with cell culture, hematopoietic progenitor assays, molecular cloning, vector biology, cellular or tumor immunology, murine models and basic molecular biology techniques would be advantageous.

**RESEARCH ASSOCIATES:** Level 1 or 2 opportunities are available for scientifically rigorous, highly motivated individuals with a Bachelor's degree, preferably in the sciences. Experience with cell culture, molecular cloning, animal care and basic molecular biology techniques is helpful, but not essential.

Please send your resume to: Human Resources, Dept. SC, City of Hope and Beckman Research Institute, 1500 E. Duarte Rd., Duarte, CA 91010-3000. Fax (818) 301-8448. EOE.

### Cell & Molecular Biology of Eukaryotic Systems

The Department of Biological Sciences in the Faculty of Science at the University of Alberta invites applications for a Research Scholar faculty position with research interests in cell and molecular biology of eukaryotic systems. The effective date of employment will be July 1, 1996. The candidate should have expertise in the use of molecular genetics techniques and have experience in any aspect of modern cell biology, typically in research areas such as developmental biology, cell cycle regulation, parasitology, immunology, neurobiology, etc. The candidate must have a Ph.D. and two or more years of postdoctoral research experience.

Appointments may be made at levels of Assistant Professor (\$39,230 - \$55,526), or Associate Professor (\$48,527 - \$69,664). The position will be long-term and will be funded through an external agency, but the incumbent will enjoy the privileges of the University academic rank at which the appointment is made. The granting of these awards is by competition and is made on the basis of excellence. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Candidates should forward a curriculum vitae, list of publications, a statement of research interests and the names of three referees to:

Dr. William Paranchych  
Department of Biological Sciences  
CW405 Biological Sciences Bldg.  
University of Alberta  
Edmonton, Alberta  
Canada T6G 2E9

Closing Date:  
April 30, 1995

*The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.*

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or fax +44 01223 302 068



## RESEARCH VIROLOGIST

### ENTEROVIRUS SECTION RESPIRATORY AND ENTERIC VIRUSES BRANCH

Division of Viral and Rickettsial Diseases,  
National Center for Infectious Diseases,  
Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention is seeking qualified applicants for a staff position in the Enterovirus Section, Respiratory and Enteric Viruses Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases. The persons appointed will direct and participate in studies on poliovirus and other enteroviruses, including molecular studies of genetic and antigenic variation and its role in human disease, immune response to infection, development of advanced diagnostic technologies, and supervision of reference virus diagnostic activities. Research virologists with molecular biology and sequencing experience are being sought.

Qualifications preferred include a doctoral degree, significant scientific accomplishments in one or more areas of relevant research, and the ability to provide leadership for support staff.

Salary range is \$41,104 to \$63,539 per annum, depending on qualifications.

Further information can be obtained from Mark A. Pallansch, Ph.D., Chief, Enterovirus Section, Respiratory and Enteric Viruses Branch (G17), Division of Viral and Rickettsial Diseases, Centers for Disease Control and Prevention, Atlanta, GA 30333. Telephone: (404) 639-2749. Facsimile: (404) 639-1307.

Interested candidates also may send their curriculum vitae in confidence along with the names of three professional references by May 1, 1995 to Janie L. Oddy, Personnel Management Office, Centers for Disease Control and Prevention (D01), Atlanta, GA 30333.

*CDC is an Equal Opportunity Employer  
and provides a smoke-free work environment.*

## MOLECULAR TOOL, INC.

Molecular Tool, Inc. is a biotechnology company located on the Hopkins Bayview Research Campus in Baltimore, Maryland committed to the development and commercialization of highly integrated, DNA-based systems for the analysis and interpretation of genetic variations. Molecular Tool has openings for the following positions.

### PROCESS & PRODUCT DEVELOPMENT MANAGER-GENETICS

This individual will have department wide responsibility for managing the design and scale-up of genetic and nucleic acid based diagnostic tests and products through pilot development scale. Requires a Masters/Ph.D. in Genetics and Molecular Biology. Knowledge of basic molecular biology techniques and at least 3-5 years management experience within the genetics industry required. GMP/GLP familiarity a plus. Requires working knowledge of applicable scientific and technical skills as well as excellent communication skills.

### PRINCIPAL SCIENTIST/NUCLEIC ACID BIOCHEMIST

This individual must have Ph.D. in Biochemistry or related field and 5-10 years postdoctoral experience in nucleic acid biochemistry and enzymology. Postdoctoral research experience in Nucleic Acid enzymology is a plus. The selected candidate should have experience managing an interdisciplinary team of Ph.D. and MS level scientists in the development of genetic analysis, biochemistry and technology.

### PROCESS RESEARCH SPECIALIST

This individual will be responsible for QC/QA testing and development, troubleshooting biochemical and operational processes and performing routine processing operations. Requires BS/MS in Biochemistry/Molecular Genetics or related field and 2-5 years experience in biotechnology industry. Knowledge of basic molecular biology techniques required. Applicants must be highly motivated and possess excellent laboratory skills.

Please forward two copies of your resume along with three references and salary history to Human Resources, Molecular Tool, Inc., Alpha Center, 5210 Eastern Avenue, Baltimore, MD 21224. No phone calls please. EOE

### Analytical Environmental Chemist

Assistant Professor in the Department of Environmental Toxicology and Assistant Analytical Environmental Chemist in the Agricultural Experiment Station, College of Agricultural and Environmental Sciences. Nine month tenure/eleven month term, teaching and research appointment. Expertise required in state-of-the-art quantitative analytical chemistry and interest in the development of novel and improved techniques for measurement of important toxicants in air, water, soil and biota. Must have a Ph.D. and postdoctoral experience; a solid background in analytical chemistry, environmental chemistry or a related field; publications demonstrating potential for success in extramurally funded independent research; and evidence of interest and proficiency in teaching and service. The candidate will be expected to establish an independent, competitive research program in an area of environmental importance complementing the programs of existing faculty; to teach at least one core course on Analysis of Toxicants in the undergraduate toxicology curriculum; to teach a graduate course; and to advise and supervise both undergraduate and graduate students. Send resume, transcripts (official transcripts if the Ph.D. was granted in the past five years), list of publications, short statements of research and teaching interests, and names and addresses of three references to: **Recruitment Committee, Department of Environmental Toxicology, University of California, Davis, CA 95616-8588.** The position will remain open until filled; however, to assure consideration, applicants should apply by **May 1, 1995.**

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### Massachusetts Institute of Technology:

The Department of Mechanical Engineering invites applications for an Assistant/Associate tenure track position in Information Science and Technology. The candidate's areas of interest should complement and enhance current research activities in the department in: instrumentation physics; nano-technology; product/system design including database design and networking; information theory, system identification and control systems; intelligent systems and machine learning; bio-engineering and man-machine systems; manufacturing and applied mechanics.

A Ph.D. in the field of Science or Engineering or equivalent with experience in engineering systems and information science and technology is required as well as a demonstrated ability to carry out innovative research and to conduct outstanding teaching. A strong background in multi-disciplinary engineering systems is highly desirable. Applicants should submit a curriculum vitae (with citizenship and/or visa status); a publication list; names, addresses and phone numbers of at least four references; and a one page professional statement describing their goals and aspirations at MIT.

Applications should be sent to:

Information Science and Technology  
Search Chair  
Massachusetts Institute of Technology  
Department of Mechanical Engineering  
Room 3-173

77 Massachusetts Avenue  
Cambridge, MA 02139-4307

Applications must be submitted  
by May 26, 1995.

*MIT is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly encouraged to apply.*

### EMORY UNIVERSITY SCHOOL OF MEDICINE

DEPARTMENT OF  
ANATOMY AND CELL BIOLOGY

### Chair

Emory University School of Medicine invites nominations and applications for Chair of the Department of Anatomy and Cell Biology. The Chair is expected to maintain an active, funded laboratory program and provide leadership in the continuing development of the Department's strong research and professional teaching programs and interdisciplinary Ph.D. training in the Graduate School of Arts and Sciences. The 17 faculty members are active primarily in the fields of cellular and systems neurobiology and in cell and developmental biology. The Anatomy Building includes 30,000 nsf of research and administrative space, and additional laboratories will be available for recruitment of new faculty. Emory University is a major research institution with the 7th largest endowment in the country. Candidates must have the Ph.D., M.D. or comparable degree, a distinguished record of scientific accomplishment, and demonstrated administrative skills. Salary is negotiable. Applications including a current curriculum vitae, a narrative statement of research interests and the names and addresses of three references should be sent to:

Anatomy and Cell Biology  
Chair Search Committee  
c/o Dean's Office, Emory University  
School of Medicine  
408 Woodruff Health Sciences Center  
Administration Building  
1440 Clifton Road, N.E.  
Atlanta, Georgia 30322

The Search Committee will review applications until the position is filled.

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University of Illinois at Urbana-Champaign

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The Beckman Institute for Advanced Science and Technology at the University of Illinois at Urbana-Champaign (UIUC) is the nation's largest, most broadly based multidisciplinary academic research organization, housing more than 700 researchers in areas ranging from biological intelligence and human-computer intelligent interaction, to molecular and electronic nanostructures. The 84 research faculty are drawn from 16 departments at UIUC.

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The position is a regular full-time academic professional appointment. An earned doctorate in an engineering or science discipline is strongly preferred, but the combination of an advanced degree in science or engineering and appropriate industrial experience will be considered.

The position begins August 21, 1995, and all applications received by May 1, 1995 will receive full consideration, though applications may be accepted until the position is filled. Please send a letter of interest, resumé, and names and contact information for at least three references to:

Jiri Jonas, Director

Beckman Institute for Advanced Science and Technology  
University of Illinois at Urbana-Champaign  
405 North Mathews Avenue, Urbana, IL 61801  
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### Chair

#### Department of Pharmaceutical Sciences

The College of Pharmacy and Allied Health Professions, Wayne State University, invites applications and nominations for the position of **CHAIR OF THE DEPARTMENT OF PHARMACEUTICAL SCIENCES**. The department, which has faculty in the areas of medicinal chemistry, pharmaceuticals and pharmacology, is seeking an individual who will provide leadership as it enters into a significant period of growth. The chair will be responsible for the overall administration of the department and will be expected to provide scientific leadership in the development of strong interdisciplinary programs. Experience should be commensurate with appointment as full professor. The position will be available in July 1995. Applicants are requested to submit a statement of interest, a curriculum vitae and a brief list of references. All correspondence should be directed to:

George Dambach, Ph.D.

Associate Dean for  
Research and Graduate Programs  
School of Medicine  
Wayne State University  
540 E. Canfield, 1261 Scott Hall  
Detroit, MI 48201  
Phone: (313)577-1455  
Fax: (313)577-8777

Email: gdambac@cms.cc.wayne.edu

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**Meeting the Challenges publishes: 23 June 1995.**

**Advertising space reservation deadline: 6 June 1995.**

# SCIENCE

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Please submit cover letter, résumé, salary history, and list of suitable lecture topics. Apply to: **Biomed International, 2425-B Channing Way, Suite 457, Berkeley, CA 94704.**

### SCIENTIST

Microbiological Associates (MA) is a rapidly growing international provider of biological and toxicological safety testing services to the pharmaceutical, personal care and biotechnology industries. We seek a qualified individual with a Ph.D. in molecular biology or virology and four to six years in assay development and molecular laboratory techniques: cloning, PCR and DNA sequencing; protein chemistry, mutation detection at the molecular level, immunology and enzymology. cGMP/GLP experience is a plus. We seek enthusiastic team players and offer an excellent compensation package including profit sharing and a matching 401(k) program. Forward a résumé with salary history to the **Human Resources Department: Microbiological Associates, 9900 Blackwell Road, Rockville, MD 20850. FAX: 301-738-1036. An Equal Opportunity Employer/Minority/Female/Disabled/Veteran.**

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## COURSES AND TRAINING

### COURSE IN INTERDISCIPLINARY PHYSICS July 11-August 5, 1995

La Jolla International School of Physics, The Institute for Advanced Physics Studies, La Jolla, California, Graduate School for Interdisciplinary Physics is offering a Course in Interdisciplinary Physics July 11-August 5, 1995. Topics: Laser Neurophysics; Laser Biophysics; Molecular Psychology and Psychiatry; Physics of DNA. A one month condensed course, to be given by world renowned researchers, is designed for advanced graduates and active researchers interested in pursuing careers in interdisciplinary physics. Write: **Secretary, La Jolla International School of Physics, 7825 Fay Avenue, Suite 350, La Jolla, CA 92037. Telephone: 619-456-5737; FAX: 619-454-2679.**

## COURSES AND TRAINING

### CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND SCIENTISTS

A one-week intensive course sponsored by the Massachusetts Institute of Technology. June 12-16, 1995, Cambridge, MA. **Dr. Richard J. Cohen**, Program Director. Basic Principles of Cardiovascular Physiology, Cardiovascular Medicine, Diagnostic and Therapeutic Technologies. Contact: **Director of the MIT Summer Session. Telephone: 617-253-2101.**

## MEETINGS

### NATO ADVANCED STUDY INSTITUTE ENGINEERING OF/WITH LIPASES

May 22-June 2, 1995

Hotel Vermar

Póvoa de Varzim, Portugal

General Objectives: Systematically review the state of the art pertaining to the knowledge on the various levels of structure and catalytic function of lipases; discuss in a comprehensive and integrated manner the design and modification of lipases and the engineering aspects of the utilization of lipases in both free and immobilized forms for practical purposes. Lectures will cover: Selectivities (fundamentals and applications), Structure and function, Molecular engineering, Kinetics and thermodynamics, Role of water, Applications, Reactors, and Separation and reaction.

Lecturers: **Prof. Robert G. Jensen (USA), Dr. Thomas Foglia (USA), Dr. Frank Taylor (USA), Dr. F. Xavier Malcata (Portugal), Prof. Joaquim S. Cabral (Portugal), Dr. José M. Guisán (Spain), Prof. Didier Combes (France), Dr. Françoise M. Ergon (France), Prof. M. Dominique Legoy (France), Dr. Robert Verger (France), Prof. Lilia Alberghina (Italy), Dr. Kumar D. Mukherjee (Germany), Dr. Albert Van der Padt (The Netherlands), Dr. Maarten R. Egmond (The Netherlands), Dr. Atul M. Vaidya (UK), Dr. Jens S. Okkels (Denmark), Dr. Steffen B. Petersen (Norway), and Dr. Paavo J. Kalo (Finland).**

Organizing Committee: **Dr. F. Xavier Malcata, Director (Portugal); Prof. Joaquim M. S. Cabral (Portugal); Dr. Maarten R. Egmond (The Netherlands); and Dr. Robert Verger (France).**

Further information and application forms may be obtained from: **Dr. F. Xavier Malcata, Escola Superior de Biotechnologia, Rua Dr. António Bernardino de Almeida, 4200 Porto, Portugal. Telephone: 351-2-5580047; FAX: 351-2-590351.**

Deadline for application: April 7, 1995.

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Marketplace ads continue on page 1874



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