

# SCIENCE

## PERSONNEL PLACEMENT

### 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. Advertisements 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. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Include billing information, and desired publication date.

➤ **Mail or FAX materials to:**  
*Science* Classified Advertising  
 1333 H Street, N.W., Room 940  
 Washington, DC 20005  
 Telephone: 202-326-6555  
 FAX: 202-682-0816

➤ **Rates:** Ads are \$41 per line; \$410 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. If you would like *Science* to give estimated cost, indicate on letter.

➤ **Ads from Outside the U.S.:** Prepayment made in U.S. dollars by checks drawn on U.S. banks is required.

➤ **Credit Cards:** *Science* accepts 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.

### DISPLAY PERSONNEL ADVERTISEMENTS

For rates and information about fractional display ads (all ads 1/4 page and larger) and all Marketplace listings, contact:

Daniel Moran  
*Science* Classified Advertising  
 Telephone: 202-326-6541  
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**CONDITIONS:** Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

## POSITIONS OPEN

The Department of Neurology, University of California, Irvine (UCI), has a second opening for a Ph.D. in pharmacology, psychobiology, neuroscience or biology, or related field at the **ASSISTANT ADJUNCT PROFESSOR** level. Candidate would join the movement disorders group working with an M.D. and a Ph.D. should have experience in HPLC, receptor binding and behavioral studies, in vivo autoradiography. Send curriculum vitae and names of three references to: **Dr. Stanley Van Den Noort, Chairman, 107 Whitby Building, UCI, Irvine, CA 92715.** Refer to position #91-6. *Affirmative Action/Equal Opportunity Employer.*

### PSYCHONEUROIMMUNOLOGIST UNIVERSITY OF TEXAS MEDICAL BRANCH (UTMB)

The Department of Psychiatry and Behavioral Sciences is searching for candidates for a position at the **ASSISTANT PROFESSOR** level. We are looking for an independent scientist to collaborate with an established, multidisciplinary group in studying the interactions between the nervous and immune systems. The applicant should have a Ph.D., or equivalent degree with postdoctoral experience. Preference will be given to individuals with molecular biology experience and interests in neuroendocrinology, cytokines, neuroimmunology or behavioral disorders. Primarily, the candidate will be expected to carry on an active research program; but clinical participation, dependent upon the individual's qualifications and interests, may be possible. Women and minorities are encouraged to apply. Applicants should submit full curriculum vitae, research interests, three recent reprints, and the name of three references to:

**Dr. Eric M. Smith, Chairman**  
 Psychoneuroimmunologist Search Committee  
 Department of Psychiatry and Behavioral Sciences  
 University of Texas Medical Branch  
 Galveston, TX 77550

*Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.*

**FACULTY POSITION.** Applications are invited from **ANATOMISTS** for a tenure-track position at the **ASSISTANT PROFESSOR** level who can participate in a team-taught veterinary gross anatomy course. It is expected that the successful candidate will hold the D.V.M. and/or Ph.D. degree and will be expected to establish an independent research program in cellular or molecular biology. Preference will be given to candidates with research interests in neurobiology, toxicology, teratology, or reproductive biology. Screening of candidates will begin on 21 December 1991. However, applications will be received until the position is filled. The position is available after 1 January 1992. Applications, including a cover letter, curriculum vitae, statement of research and teaching interests, three letters of recommendation and reprints of three representative publications, should be sent to: **Dr. Hara P. Misra, Professor and Head, Department of Biomedical Sciences, Virginia-Maryland College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061.**

*Virginia Polytechnic Institute and State University is an Equal Opportunity/Affirmative Action Employer.*

The Department of Biological Sciences at Lock Haven University in Lock Haven, Pennsylvania, is seeking candidates for two tenure-track positions at the **ASSISTANT PROFESSOR** level. Positions will begin with the 1992-93 academic year. Ph.D. required. Applicants should be field-oriented and capable of teaching some combination of the following: zoology (invertebrate and vertebrate), field natural history (nonmajors), introductory-level biology for majors and/or nonmajors, science seminars, and possible animal behavior or speciality course. Areas of specialization open but should complement existing faculty in entomology, floristics, ichthyology, limnology, and ornithology.

Candidates also expected to supervise undergraduate student research. University teaching experience desirable. Send curriculum vitae, official or unofficial transcripts, and names, telephone numbers and addresses of three references by 31 January 1992 to: **Chair, Search Committee, Department of Biological Science, Lock Haven University of Pennsylvania, Lock Haven, PA 17745.** Women and minority candidates are encouraged to apply. *Lock Haven University is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### CELLULAR AND MOLECULAR NEUROBIOLOGY DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS THE UNIVERSITY OF IOWA COLLEGE OF MEDICINE

Applications are invited for tenure-track positions at the **ASSISTANT PROFESSOR** level. We are interested in individuals studying fundamental problems in neurobiology, including ligand- or voltage-gated channel/receptors, synaptic mechanisms, and intra- or inter-cellular signaling, who will complement existing strengths in mechanisms of signal transduction, structure and function of membrane proteins, and regulation of gene expression. Applicants should have a strong record of research accomplishment using modern electrophysiological, cell biological and/or molecular biological techniques. Substantial start-up support is available for equipment, personnel and supplies. Minimum requirements include Ph.D. and/or M.D. degrees and 2 years of relevant postdoctoral training. Screening will begin 1 December 1991. Send curriculum vitae, a statement of research plans, representative publications and have at least three letters of recommendation sent to:

**Neurobiology Search Committee**  
 Department of Physiology and Biophysics  
 The University of Iowa College of Medicine  
 Iowa City, IA 52242

*The University of Iowa is an Equal Opportunity and Affirmative Action Employer. Women and minorities are encouraged to apply.*

### ENVIRONMENTAL SCIENCE/ECOLOGY FACULTY POSITION

The Department of Natural Sciences at the College of St. Francis (CSF) invites applications for a full-time faculty position at the **ASSISTANT PROFESSOR** level beginning August 1992. The successful candidate will play a leadership role in the implementation of a new environmental science major, including: teaching (earth science, botany, ecology, environmental issues and other courses in area of expertise), advising environmental science majors, supervision of undergraduate research and internships, and service on college committees. Doctorate in environmental science, ecology or related field required. Undergraduate teaching experience preferred.

The College of St. Francis is a Catholic college offering programs in the liberal arts and sciences as well as professional, preprofessional and career programs at both the undergraduate and graduate levels. CSF is located 35 miles southwest of Chicago. *CSF is an Equal Opportunity Employer and encourages the applications of qualified women and minorities.* Salary and benefits are competitive.

To apply, send a letter of application, curriculum vitae, transcripts, sample syllabi, and three letters of recommendation to: **Ms. Joanne Corcoran, Science Search Secretary, College of St. Francis, 500 Wilcox Street, Joliet, IL 60435.** Review of applications will begin 15 December 1991 and continue until the position is filled.

### FACULTY POSITIONS IN MOLECULAR ENDOCRINOLOGY

The Laboratory of Molecular Endocrinology at the Royal Victoria Hospital, McGill University, invites applications for two tenure-track positions at the level of **ASSISTANT PROFESSOR** (or higher). We seek individuals with a strong background in molecular biology whose research interests should be related to endocrinology and, preferably, include one of the following areas: receptor structure and function, intracellular signaling mechanisms, or mechanisms of gene transcription. Requirements are a Ph.D. or M.D. degree; several years of postdoctoral experience, and a potential or demonstrated capacity to initiate and conduct an independent, externally funded research program in the area of molecular endocrinology. The Laboratory of Molecular Endocrinology is located in the research wing of the Royal Victoria Hospital, a major McGill teaching hospital. Core research facilities and start-up support are available. Applicants should submit their curriculum vitae, a letter summarizing background and research goals, as well as names and addresses of references to:

**Hans H. Zingg, M.D., Ph.D.**  
 Director, Laboratory of Molecular Endocrinology  
 Royal Victoria Hospital  
 687 Pine Avenue West  
 Montreal, Quebec, Canada H3A 1A1  
 FAX: 514-982-0893

## POSITIONS OPEN

### FACULTY POSITION

The Department of Biochemistry and Molecular Biology at the University of Texas M. D. Anderson Cancer Center, invites applications for tenure-track positions at the **ASSISTANT PROFESSOR** level. The department is composed of a group of highly interactive cell and molecular biologists and is entering a growth phase. We are particularly interested in individuals working in the areas of cellular signaling and regulatory processes associated with cell growth and differentiation. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member. Applicants should send a letter outlining their research interests, their curriculum vitae, and three letters of reference to: **Dr. Eric N. Olson, Department of Biochemistry and Molecular Biology (Box 117), The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** The University of Texas M. D. Anderson Cancer Center is a smoke-free institution. An Affirmative Action/Equal Opportunity Employer.

**ECOLOGY/BIOLOGY.** Indiana University Northwest. **ASSISTANT PROFESSOR.** Tenure-track position to begin fall semester 1992. Candidates must have a Ph.D. and be committed to teaching undergraduates in biology with a special interest in ecology and environmental concerns. Significant research potential exists in many areas. Indiana University Northwest is part of the Indiana University system with an enrollment of 5500 plus students. Applicants should send curriculum vitae, transcripts, and three letters of reference by 8 January 1992 to: **Chairman, Biology Search Committee, 335 Marram Hall, Indiana University Northwest, 3400 Broadway, Gary, IN 46408.** Indiana University is an Affirmative Action, Equal Opportunity Institution.

### EXERCISE PHYSIOLOGIST

The Department of Kinesiology is seeking an exercise physiologist in either the cellular/biochemical mechanisms of exercise or the wellness/physical activity epidemiological aspects of exercise. The appointment, beginning August 1992, is expected to be at the **ASSISTANT PROFESSOR** (tenure track) level but candidates at all levels will be considered. Send your curriculum vitae, three letters of reference and examples of publications to: **Dr. William Byrnes, Kinesiology, University of Colorado, Boulder, CO 80309-0354.** Applications must be postmarked by 15 January 1992. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.

### FRAMINGHAM STATE COLLEGE DEPARTMENT OF BIOLOGY

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level, to begin in the fall of 1992. Applicants should be broadly trained botanists with expertise in phycology and mycology and familiar with quantitative ecology and the aquatic environment. Candidates must have a Ph.D. at the time of their appointment and a strong commitment to undergraduate teaching. Applicants should send a letter of interest, curriculum vitae, graduate transcripts, and the names of three references by 15 January 1992 to: **Dr. J. C. Klaas, Department of Biology, Framingham State College, Framingham, MA 01701.** An Equal Opportunity/Affirmative Action Employer. People of color, women, and persons with disabilities are encouraged to apply.

### BIOLOGY TEACHING POSITION

**ASSISTANT PROFESSOR** to teach 12 undergraduate semester hours per semester, including upper division courses in cell and animal physiology, genetics, marine mammalogy, general mammalogy, and perhaps other courses; advise undergraduate students; perform appropriate university and public service. Ph.D. in biology or related field required. Commitment to quality teaching essential; prior biology teaching at college or university level preferred. Salary is competitive and commensurate with qualifications and experience. This is a 9-month, tenure-track appointment. Submit application, curriculum vitae, names of three references, unofficial transcripts and one-page statement of philosophy of biology education by 31 January 1992 to: **University of Alaska Southeast, Personnel Services, 11120 Glacier Highway, Juneau, AK 99801-8675.** Official transcripts will be required prior to hiring. The University of Alaska Southeast is an Affirmative Action/Equal Opportunity Employer and Educational Institution.

## POSITIONS OPEN

### EASTERN NEW MEXICO UNIVERSITY (ENMU)

**ASSISTANT PROFESSOR OF BIOLOGY.** Two tenure-track positions. (1) Botany—plant general biology, anatomy, and physiology; biogeography; systematics; general biology for nonmajors; knowledge of statistical applications. (2) Aquatic biology—limnology; evolution; fisheries biology; ecology; animal general biology; statistical applications. Required: Ph.D., teaching excellence, commitment to scholarly activity and research, demonstration of diverse knowledge in biological aspect of appropriate field. Send letter of application describing teaching experience and research interests, curriculum vitae, official transcripts, and three letters of reference to: **Biology Search Committee, ENMU, Portales, NM 88130.** Indicate position #1 or #2. Deadline for applications is 15 January 1992. *New Mexico is an open records state; therefore, it is the policy of the university to reveal to the public the identities of the applicants for whom outside inquiries have been made or for whom on-campus interviews are scheduled.* Affirmative Action/Equal Opportunity Employer.

### INVERTEBRATE BIOLOGY ASSISTANT PROFESSOR

The Department of Biology, Hamilton College, invites applications for a tenure-track position at the assistant professor level, effective 1 July 1992. Applicants must have a Ph.D. degree; postdoctoral training and teaching experience preferred. The successful applicant will teach a survey course in invertebrate biology, be willing to teach a nonmajors course or team-teach in the introductory core, develop a course in his/her specialty not to include ecology, and develop an ongoing research program involving undergraduates. Research that incorporates the Department's fully equipped SEM and TEM facility will be favorably considered. Send curriculum vitae, statements of teaching and research interests, and three letters of reference to: **David A. Gapp, Chair, Biology Department, Hamilton College, 198 College Hill Road, Clinton, NY 13323-1292.** Applications must be received by 15 January 1992. *Women and members of minority groups are encouraged to apply.* Hamilton College is an Equal Opportunity/Affirmative Action Employer.

**MICROBIAL ECOLOGIST.** Applications are invited for the first of three tenure-track **ASSISTANT PROFESSORSHIPS** to be filled in the area of aquatic ecosystems. We are particularly interested in individuals conducting field-based biogeochemical studies of benthic, heterotrophic ecosystems, but all applicants will be considered. Current related faculty research includes plankton ecology, environmental physiology, aqueous geochemistry, and sedimentation. A Ph.D. and demonstrated interest in multidisciplinary research required. Expertise in statistics desirable. Teaching at the undergraduate and graduate (M.S. and Ph.D.) levels and an active research program expected. Send curriculum vitae, statement of research and teaching interests, selected (p)reprints, and three letters of reference to: **Craig Williamson, Department of Earth and Environmental Sciences #31, Lehigh University, Bethlehem, PA 18015.** Application review begins 2 January 1992. *Lehigh is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

### ASSISTANT/ASSOCIATE PROFESSOR U.T. M. D. ANDERSON CANCER CENTER SCIENCE PARK

The Department of Veterinary Resources, University of Texas M. D. Anderson Cancer Center Science Park, invites applications for a tenure-track position at the Assistant Professor level to initiate an SIV/HIV research program. The position is with a satellite research laboratory that holds large numbers of primates, located in the rural, central Texas community of Bastrop, Texas. Candidates (Ph.D./M.D./D.V.M.) should have at least 3 years of postdoctoral research training with infectious disease agents and experience in nonhuman primate retrovirology is desirable. Candidates should have a publication record and will be expected to secure grant funding. Salary/benefits and start-up support are nationally competitive. Support facilities include a newly constructed molecular pathology laboratory. Submit curriculum vitae, description of research interests, and names of three references to: **Michale E. Keeling, D.V.M., Professor and Chairman, Department of Veterinary Resources, U.T. Cancer Center Science Park, Route 2, Box 151-B1, Bastrop, TX 78602.** The University of Texas is an Equal Opportunity/Affirmative Action/Smoke-Free Employer.

## POSITIONS OPEN

### FACULTY POSITION AVAILABLE IN MOLECULAR GENETICS

The Division of Life Sciences, The University of Texas at San Antonio, invites applications for a tenure-track **ASSISTANT PROFESSOR** in molecular genetics. Candidates must show demonstrated research productivity and substantial ability and interest in teaching genetics at the undergraduate and graduate levels. A Ph.D. is required and postdoctoral experience on the nervous system is desired. Submit curriculum vitae, names of at least three references, and representative publications to: **Director, Division of Life Sciences, The University of Texas at San Antonio, San Antonio, TX 78249-0662.** Closing date to receive applications is 1 March 1992. *The University of Texas at San Antonio is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### THE UNIVERSITY OF CALGARY ELECTRON MICROSCOPIST

The University of Calgary Department of Anatomy invites applications for a full-time academic position at the **ASSISTANT PROFESSOR** level as a cell biologist/electron microscopist. Qualifications include a Ph.D. and/or M.D., 2 years' postdoctoral experience, and a proven research record in eukaryotic molecular/cell biology with expertise in electron microscopy. Rank and salary will be commensurate with qualifications and experience.

The successful candidate will be expected to compete successfully for salary and establishment grant support from the Alberta Heritage Foundation for Medical Research, and will have 75% of time protected for research.

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal people, visible minorities, and people with disabilities.*

Submit curriculum vitae, synopsis of research interests, and the names and addresses of three referees, by 15 January 1992 to:

**Dr. R. Hawkes  
Head, Department of Anatomy  
The University of Calgary  
3330 Hospital Drive N.W.  
Calgary, Alberta T2N 4N1 Canada**

### IMMUNOLOGIST

Bradley University invites applications for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. The starting date is 17 August 1992. Responsibilities, in addition to participation in the introductory courses, include teaching an upper division course in immunology and one of the following areas: microbiology, molecular biology, or biochemistry. The individual will be expected to maintain an active research program involving undergraduate and/or graduate students. A Ph.D. is required and postdoctoral experience is preferred. Applicants should submit curriculum vitae, a statement of research interests and three letters of recommendation to: **Dr. John A. DePinto, Department of Biology, Bradley University, Peoria, IL 61625.** To ensure full consideration applications should be received by 31 December 1991. Applications will continue to be accepted until the position is filled. Interviews may be conducted before the closing date, but no final decision will be made before that time. *Affirmative Action/Equal Opportunity Employer. Minorities and Women are encouraged to apply.*

### FACULTY POSITION AVAILABLE IN MOLECULAR VIROLOGY

The Division of Life Sciences, The University of Texas at San Antonio, invites applications for a tenure-track **ASSISTANT PROFESSOR** in molecular virology. Candidates must show demonstrated research productivity and substantial ability and interest in teaching virology at the undergraduate and graduate levels. A Ph.D. is required and postdoctoral experience on the nervous system is desired. Submit curriculum vitae, names of at least three professional references, and representative publications to: **Director, Division of Life Sciences, The University of Texas at San Antonio, San Antonio, TX 78249-0662.** Closing date to receive applications is 1 March 1992. *The University of Texas at San Antonio is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

# If you're a PhD or Post Doctoral Chemist... ...you should be in Chicago in January

In the third week of January Glaxo Group Research will be holding preliminary interviews for Synthetic Organic Chemists about to complete their PhD/Post Doc in the States in 1992.

If you're successful, we'll invite you to the UK for a full interview

and a tour of our facilities.

Please fax your CV (or send by express courier) by 20th December 1991 to Ted Smith, Human Resources Manager, Glaxo Group Research, Park Road, Ware, Herts SG12 0DJ, England. Fax: (0920) 469237.

## Glaxo Group Research

## MOLECULAR MEDICINE TRAINING PROGRAM

The National Institute of Diabetes and Digestive and Kidney Diseases at the National Institutes of Health has established a novel program for training physicians in advanced basic molecular biology and genetics and their applications to human disease. The three year program combines basic laboratory research in molecular biology and genetics with the option of clinical training in molecular biology and genetics with the option of clinical training in several clinical

subspecialties. Research training takes place in the laboratories of the NIDDK intramural program. These laboratories are part of the main NIH intramural campus located in Bethesda, Maryland, a 20 minute ride from Washington, D.C. The intramural program of the NIH offers an outstanding and world-renown research environment.

Clinical training leading to board certification is available in the following participating

subspecialties: Endocrinology, Genetics, Gastroenterology, and Hematology. First year salary is \$38,500; second year is \$40,500; third year is \$42,500.

For additional information, please send your curriculum vitae and a list of three references to:

**Allen M. Spiegel, M.D., Director,  
Division of Intramural Research**

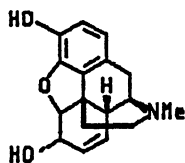
PHN: 301-496-4128  
FAX: 301-496-9943

### National Institute of Diabetes and Digestive and Kidney Diseases

National Institutes of Health, Building 10, Room 9N222, 9000 Rockville Pike, Bethesda, MD 20892

NIH is an Equal Opportunity Employer

## POTENTIAL DRUGS OF ABUSE STANDARDS



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Pharmatech Int. is seeking contracts for the identification, synthesis and neuropharmacology screening of potential new drugs of abuse. We invite Forensic Laboratories, Federal/State Agencies and Private Organizations in helping us to establish a new Data/Sample Base to meet the future challenges of identification/characterization/toxicology/emergency treatment of new drugs of abuse. Customized research program inquiries are welcome. Please call or write: M. Trampota, Eng Medicinal Chemistry Section, Pharmatech International, Inc. 56 Old Indian Rd., West Orange, NJ 07052 (201) 669-8337 (201) 672-5548 Fax: (201) 736-3893

## HUMAN GENETICIST

Molecular Genetics of Disease and Genome Technology  
Assistant, Associate or Full Professor

Roswell Park Cancer Institute seeks applicants who have demonstrated research and funding excellence in human molecular genetics. This tenure-track position requires establishing a vigorous, independent, grant-supported research program; directing graduate research; and participating in teaching graduate courses in the applicant's area of interest. Preference will be given to those involved in the molecular characterization of human inherited diseases, including cancer, and the development of human genome technology. Active participation in program projects focusing on the molecular genetics of disease and genome mapping will be encouraged. Academic appointments will be in the Roswell Park Division, State University of New York at Buffalo. Competitive rank, salary, start-up funds and space will be commensurate with qualifications. Salary will be provided in full by the State of New York.

Roswell Park is a National Cancer Institute-designated comprehensive cancer center. The successful applicant will join a dynamic faculty that has recently begun a significant expansion at both the research and clinical level. The Department of Human Genetics is an active research department with extensive interactions with researchers in other departments with modern molecular biology programs. There are excellent opportunities for collaboration with the clinical departments at Roswell Park and with researchers and clinicians at the State University of New York at Buffalo. Buffalo, a Western New York city between Lakes Erie and Ontario, has the cultural amenities of a large city within minutes of a rural setting.

Please send curriculum vitae, a brief description of research interests and three references to: Thomas B. Shows, Ph.D., Chairman, Department of Human Genetics, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, New York 14263.



An Affirmative Action/Equal Opportunity Employer

## POSITIONS OPEN

The Department of Neuroscience at the Albert Einstein College of Medicine seeks a **MOLECULAR NEUROBIOLOGIST** at the **ASSISTANT PROFESSOR** level. Applicants must show exceptional promise of establishing a vigorous, independent research program. To apply, please submit curriculum vitae, bibliography, brief description of research plans and names of three references to: **Michael V. L. Bennett, Professor and Chairman, Department of Neuroscience, Albert Einstein College of Medicine, 1410 Pelham Parkway South, Bronx, NY 10461.**

*Equal Opportunity Employer.*

**ASSISTANT PROFESSOR/PLANT BIOLOGIST.** The Department of Biology of Dickinson College seeks applicants for a tenure-track position in plant biology with interests in field botany, systematics, and diversity, including both vascular and non-vascular plants. Teaching responsibilities include upper level and introductory courses. The successful candidate will have access to institutional start-up and research support funds and will be expected to develop an active research program involving undergraduates. Send curriculum vitae, statement of research and teaching interests, transcripts and three letters of recommendation by 20 January 1992 to: **Dr. William Jeffries, Department of Biology, Dickinson College, Carlisle, PA 17013.** Dickinson is a highly selective liberal arts college with an emphasis on innovative undergraduate science education. *Dickinson College is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION AVAILABLE IN MOLECULAR CELL BIOLOGY AND IMMUNOLOGY

The Division of Life Sciences, The University of Texas at San Antonio, invites applications for a tenure-track **ASSISTANT PROFESSOR** in molecular cell biology and immunology. Candidates must show demonstrated research productivity and substantial ability and interest in teaching immunology at the undergraduate and graduate levels. A Ph.D. is required and postdoctoral experience on the nervous system is desired. Submit curriculum vitae, names of at least three professional references, and representative publications to: **Director, Division of Life Sciences, The University of Texas at San Antonio, San Antonio, TX 78249-0662.** Closing date to receive applications is 1 March 1992. *The University of Texas at San Antonio is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**FACULTY POSITION IN NUTRITIONAL BIOCHEMISTRY.** Department of Food Science University of Illinois at Urbana-Champaign. Applications are invited for a tenure-track faculty position as **ASSISTANT PROFESSOR** in the Department of Food Science at the University of Illinois-Urbana. The successful candidate will be expected to teach an advanced undergraduate course concerning the biochemical aspects of human nutrition, and develop an advanced course in his/her area of specialization. Research responsibilities will involve development of an internationally recognized research program in the area of the molecular and biochemical nutrition. It is expected that the successful candidate will be appointed to the faculty of the Division of Nutritional Sciences. Starting date 21 August 1992. To assure consideration, complete applications should be received by 15 March 1992. Submit letter of application with curriculum vitae, transcripts, publication list, one-page summary of past accomplishments, and description of research goals with at least three letters of reference sent directly to: **Willard J. Visek, M.D., Ph.D., University of Illinois, College of Medicine, 190 Medical Sciences Building, 506 South Mathews, Urbana, IL 61801. Telephone: 217-333-0119.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

**TEMPORARY (NONTENURE TRACK) ASSISTANT PROFESSOR.** To study the regulation of LH receptor gene expression and gene transcripts. The successful candidate should have a strong background in genes and gene expression, good publications, and a Ph.D. degree in the area of molecular biology with two or more years of postdoctoral training. Submit curriculum vitae and have three letters of references sent to: **Dr. Tae Ji, Department of Molecular Biology, University of Wyoming, Laramie, WY 82071-3944.** *The University of Wyoming is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**EUKARYOTIC CELL BIOLOGIST.** The Department of Biology at New Mexico State University anticipates making a tenure-track faculty appointment at the **ASSISTANT PROFESSOR** level for fall 1992. Applicants are expected to have postdoctoral research experience and the ability to implement a molecular approach to research in plant or animal cell biology. Areas of interest include but are not restricted to developmental biology, neurobiology, and genetics. The successful candidate will be expected to develop a vigorous, externally fundable research program and to teach at the undergraduate and graduate levels. This person will also have the opportunity to participate in the Molecular Biology Graduate Program and the NIH-sponsored Minority Access to Research Careers and Minority Biomedical Research Support programs. *Women and minority candidates are strongly encouraged to apply.* The department offers bachelor's degrees in biology and microbiology and an M.S. and Ph.D. in biology. Submit curriculum vitae, concise statements of research and teaching interests, and the names, addresses, and telephone numbers of at least three references to: Dr. Cecilio R. Barrera, Search Committee, Department of Biology, Box 30001, New Mexico State University, Las Cruces, NM 88003. Review of applications will begin on 10 January 1992. *New Mexico State University is an Affirmative Action/Equal Opportunity Employer.* (Position is contingent upon the availability of funds.)

### FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at the University of Massachusetts Medical School has two openings for entry level **ASSISTANT PROFESSORS**. Applicants must have completed the M.D. or Ph.D. degree, at least 2 years of postdoctoral research training, and have a strong background and research interest that focuses on cellular and molecular bases of physiology. Successful applicants will be expected to conduct active independent research programs and participate in teaching medical and graduate students.

Candidates should submit by 1 December 1991 curriculum vitae, a complete list of publications, a brief statement summarizing present and future research interests and objectives, and have three letters of reference sent to:

H. Maurice Goodman, Ph.D.  
Professor and Chairman  
Department of Physiology  
University of Massachusetts Medical School  
55 Lake Avenue North  
Worcester, MA 01655

*The University of Massachusetts Medical School is an Affirmative Action/Equal Opportunity Employer. Applications from women, minorities and handicapped persons are especially encouraged.*

## ATTENTION SCIENCE ADVERTISERS \$40 SPECIAL

Place your classified ad in any January 1992 or February 1992 issue of *SCIENCE* and we'll give you double exposure. We'll display the same position announcement at the **Employment Exchange** during the **AAAS Annual Meeting** for only \$40 more. That's less than the cost of one additional line.

Hurry—place your ads now! The **Employment Exchange** will take place at the **AAAS Annual Meeting**, 7 to 10 February 1992, at the Hyatt Regency Hotel in Chicago, Illinois. Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

When you place your classified ad in *SCIENCE*, simply let us know that you want to take advantage of the \$40 Special and we'll do the rest.

For more information on how you can interview candidates on-site contact Jacquelyn Roberts at (202) 326-6737.

# BIOTECH UPDATE

## Developments in Immunological Manipulation foster significant career opportunities.

American Cyanamid Company has a longstanding and highly successful commitment to the discovery and development of new products through research. Continued expansion of our research facility in Princeton, NJ has created opportunities within the Immunology Group. We are seeking creative and highly motivated individuals to establish and build basic research programs in their respective fields, as well as integrate with established programs.

Individuals will join a productive group utilizing modern techniques in immunology to elucidate the host's response to pathogens and manipulation of the host's neuroendocrine system. Current research interests are focused on establishing the B and T cell epitopes to induce autoimmune responses, creating the role of existing and new cytokines in pathogenesis, and potential applications of novel immunomodulators.

### RESEARCH IMMUNOLOGISTS (PhD)

PhDs in Immunology, Cell Biology, Molecular Biology or related fields with 2-4 years' post-doctoral experience are sought. A productive scientific career as evidenced by a good publication record, quality references and a documented ability to implement independent and focused scientific programs is required.

### T Cell Epitopes and Antigen Presentation

Scientists will establish an independent research program in defining T cell epitopes in out-bred species (clustertopes), and/or establishing the influence of antigen presentation and processing on mediating such responses. Homologous proteins which may be targets of autoimmunity are also of interest. Familiarity with T cell hybridomas, antigen presentation, macrophage activation and vaccine design is desired.

### Cytokine Biologist

Scientist will establish a research program in the area of cytokine biology, with particular emphasis on identifying new or existing cytokines which play a central role in various infectious disease processes. Directed research program may encompass, but is not limited to, structure/function relationships of cytokines and receptors, synergistic activities of cytokines, chimeric molecules, and novel activities of cytokines. Experience with modern techniques in molecular biology, cellular immunology, flow cytometry and biochemistry is desired.

### RESEARCH ASSISTANT (BS/MS) Cellular or Molecular Immunology

The successful candidate will assist a senior scientist in various phases of research as it relates to the general field of defining T cell epitopes and antigen presentation/processing. A willingness to assume responsibility, develop an independent research project, and work within a team environment is required. Continuing education, publishing and presentations at scientific meetings are encouraged. A BS with 4-6 years' experience or MS with 2-4 years' experience in the general fields of Biology, Immunology, or related fields is desired. Work experience with modern techniques in molecular biology, cellular immunology, B and T cell hybridomas, biochemistry and flow cytometry is desirable.

Individuals with appropriate experience and a desire to broaden their career opportunities as well as be recognized for a diversity of scientific achievements, are encouraged to apply to: American Cyanamid Company, Personnel Department - MJD, P.O. Box 400, Princeton, NJ 08543-0400. An Equal Opportunity Employer M/F/H/V.



## POSITIONS OPEN

### ASSISTANT PROFESSOR DEPARTMENT OF SURGERY YALE UNIVERSITY SCHOOL OF MEDICINE

The Gastrointestinal Surgical Pathobiology Research Unit requires an individual skilled in membrane transport physiology and with qualifications as an independent investigator. This individual should possess detailed knowledge of transport mechanisms, molecular physiology and the techniques necessary for isolated gastric gland or renal tubule perfusion. A broad knowledge based in the area of confocal microscopy, digitized image analysis and membrane pump activities is required. Teaching skills in the area of molecular physiology and particularly ion transport are required. Forward curriculum vitae including the names of three references by 6 December 1991 to the Director of the Gastrointestinal Surgical Pathobiology Research Unit: **Irvin M. Modlin, M.D., Ph.D., Department of Surgery, Yale University School of Medicine, 333 Cedar Street, Room 109 FMB, New Haven, CT 06510. Yale is an Equal Opportunity Affirmative Action Employer.**

### RESEARCH ASSISTANT PROFESSOR

The Department of Pharmacology, SUNY Health Science Center at Syracuse seeks an M.D. or Ph.D. with 5 years of experience in nonlinear dynamics and electrophysiology for a non-tenure position of research assistant professor. Background in mathematics and studies on wave propagation in excitable media are essential, as well as experience in electronics, modeling and the recording of electrical activity from cardiac tissues. Send curriculum vitae, statement of research interests, and three letters of recommendation by 1 January 1992 to: **Dr. José Jalife, Department of Pharmacology, SUNY Health Science Center at Syracuse, 766 Irving Avenue, Syracuse, NY 13210.**

*An Equal Opportunity/Affirmative Action Employer.*

### VISITING ASSISTANT PROFESSOR OF BIOLOGY

Hope College is seeking to fill the position of visiting assistant professor of biology beginning in August 1992. This appointment will be for a 2-year period with the possibility of renewal for an additional year. The individual selected for this position will be expected to teach general microbiology and participate in the introductory program for biology majors. The individual will be strongly encouraged to take advantage of the opportunity to participate in one of the ongoing research programs in the department. The biology faculty has a strong record of activity in externally funded research. A list of research opportunities will be provided upon request.

Hope College is a distinguished Christian co-educational, residential liberal arts college affiliated with the Reformed Church in America. Hope College has maintained a strong tradition in science that involves both teaching and research. *Applications from women and minority persons are particularly encouraged.*

Qualified applicants should arrange to have curriculum vitae, transcripts, a statement of teaching competencies and indication of research orientation, and three letters of recommendation forwarded as soon as possible to:

**Dr. Harvey D. Blankespoor, Chairman  
Biology Department  
Hope College  
Holland, MI 49423**

Applications will be accepted until this position is filled.

**PHYSIOLOGIST.** Tenure-track position, **ASSISTANT PROFESSOR** to teach graduate and undergraduate human physiology, also pharmacology, neurosciences and pathophysiology. Earned doctorate plus teaching experience in allied health program. Review of applications will begin on 7 January 1992 and will continue until position is filled. Send curriculum vitae and names of three references to: **Dr. Brian Curry, School of Health Sciences, Grand Valley State University, Allendale, MI 49401. Equal Opportunity Employer/Affirmative Action.**

**SCIENCE** recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.

## POSITIONS OPEN

### RESEARCH ASSOCIATE/ RESEARCH ASSISTANT PROFESSOR BIOPHYSICS AND ELECTROPHYSIOLOGY

The Living State Physics Group of the Department of Physics and Astronomy at Vanderbilt University has an active research program utilizing magnetic and electric measurements to study electrical activity and action potential propagation in normal and injured nerve and cardiac, smooth, and skeletal muscle. We are seeking a biophysicist/electrophysiologist who is willing to conduct experiments at Vanderbilt University during the academic year and at the Marine Biology Laboratory in Woods Hole, Massachusetts, during the summer. Experience in electronics, data acquisition systems, and computer programming and mathematical modeling preferred.

Full salary and research support will be provided for 2 years, with the expectation that after this time sufficient external research funds will have been obtained to establish a nearly independent research program in biophysics. Salary and rank will be based upon experience and other qualifications. Starting date negotiable. Send curriculum vitae, representative publications, and names and addresses of three references to: **Dr. John P. Wikswo, A. B. Learned Professor of Living State Physics, Department of Physics and Astronomy, Vanderbilt University, P.O. Box 1807, Station B, Nashville, TN 37235.**

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

### ASSISTANT/ASSOCIATE PROFESSOR OF ANATOMY/HISTOLOGY

Applications are invited for tenure-track positions. The department is responsible for teaching histology and anatomy to dental and postgraduate students. Applicants must possess an advanced degree (Ph.D., M.D., D.M.D. or equivalent) and be prepared to teach both histology and gross anatomy. Research areas of particular interest include, but are not limited to, craniofacial development, and the molecular and cellular biology of the extracellular matrix. Preference will be given to candidates with demonstrated ability to obtain outside funding.

Applicants should submit a letter of application, curriculum vitae, statement of research interest, and the names/addresses of three references to: **Dr. Joel Rosenbloom, Chair, Department of Anatomy/Histology, University of Pennsylvania, School of Dental Medicine, 4001 Spruce Street, Philadelphia, PA 19104-6003. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Applications from minorities and women are particularly encouraged.**

### CELL BIOLOGY THE UNIVERSITY OF MICHIGAN PROFESSOR/ASSOCIATE PROFESSOR

The Department of Biology at the University of Michigan solicits applications for a tenured position in the general field of cell biology. This individual will join an expanding group of cell and molecular biologists who are part of a large department, with research interests that embrace a wide range of basic biological phenomena. The specific subfield of interest within cell biology is of less concern than a record of excellence. The successful candidate will have an extensive history of publication in peer-reviewed journals, a demonstrated record of training successful graduate and postdoctoral students, and a proven ability to succeed in the competition for extramural funding. The laboratory and office space of this person will be in the newly renovated Natural Science Building, and considerable set-up funds will be available. In addition to establishing a successful research program, the candidate will be expected to participate in both the undergraduate- and graduate-level teaching programs of the department. Applications should include current curriculum vitae, copies of up to five relevant reprints and a brief statement of future research plans. All applications will be confidential and candidates will be contacted before references are solicited. Application deadline is 30 January 1992. Application materials should be sent to:

**Chair, Cell Biology Search Committee  
Department of Biology  
University of Michigan  
Natural Science Building  
Ann Arbor, MI 48109-1048**

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

## POSITIONS OPEN

### AQUATIC ECOLOGY ICHTHYOLOGY PROFESSORSHIP

The Department of Systematics and Ecology anticipates a tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position opening in aquatic ecology/ichthyology to begin 17 August 1992 contingent upon final budgetary approval. A very competitive salary range is available with the precise amount dependent upon the experience of the candidate. Teaching duties will include a course in general ecology to be taught every other year, a course in fish ecology and/or fisheries biology and a course or courses in his/her specialty. The successful applicant must have an earned Ph.D. at the time of assuming the position and have research experience in fish ecology. Preference will be given to individuals with research experience in aquatic community ecology, knowledge of fish diversity, expertise in quantitative ecology, and teaching experience. A job description and information about the department and university is available upon request. A letter of application, curriculum vitae, copies of published papers, and three letters of recommendation should be sent to: **Dr. John O'Brien, Department of Systematics and Ecology, University of Kansas, Lawrence, KS 66045-2106. Telephone: 913-864-4375. Review of applications will begin on 3 January 1992 and continue until the position is filled. The University of Kansas is an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT/ASSOCIATE PROFESSOR.** The Ohio State University. Tenure-track (12-month) position in small grains breeding/genetics. Responsibilities include directing a breeding program, conducting scholarly research, teaching, and advising graduate students. Qualifications include an earned Ph.D. in a plant breeding, genetics, cytogenetics or related field with postdoctoral and/or research experience preferred. Submit two copies of: letter of application stating career goals, research interests, and qualifications; complete curriculum vitae; complete academic transcript; and names of three references by 1 February 1992 or until a suitable candidate is identified to: **Dr. Michael McMullen, Search Committee Chair, Department of Agronomy, OARDC, Wooster, OH 44691. Telephone: 216-263-3894. The Ohio State University is an Equal Opportunity Affirmative Action Employer.**

### MOLECULAR ONCOLOGY FACULTY POSITION

Louisiana State University Medical Center (LSUMC)-Shreveport is proud to announce the opening of the Center of Excellence in Cancer Research. Opportunities are available at the **ASSISTANT/ASSOCIATE PROFESSOR** level for individuals actively pursuing cancer research, especially in the areas of viral oncogenesis, growth factors, oncogenes, and signal transduction. Appointments will be jointly between the center and either the Department of Microbiology/Immunology or Biochemistry/Molecular Biology.

If interested, please send three letters of reference, a copy of your curriculum vitae and a brief description of research interests to:




**Jonathan Glass, M.D.  
Professor of Medicine  
Director, Center for Excellence in Cancer Research  
LSU Medical Center-Shreveport  
P.O. Box 33932  
Shreveport, LA 71130-3932**



The Center for Neural Science of New York University (NYU) invites applications for two tenure-track faculty positions in the area of systems and integrative neuroscience. Appointments may be made at the level of **ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR.** The Center for Neural Science is an interdepartmental unit of the Faculty of Arts and Science, cooperating with the Departments of Biology, Chemistry, Computer Science, Mathematics, Physics, and Psychology. New members of the center hold appointments jointly in the center and in one or more of these departments.

Candidates should send curriculum vitae, a statement of current research interests, copies of recent relevant publications and the names and addresses of three or more individuals willing to provide letters of reference, to: **Professor Robert Sharpley, Director, Center for Neural Science, NYU, Meyer Hall, New York, NY 10003. NYU encourages applications from women and members of minority groups.**



# How to solve the equation for success.

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scientific excellence + teamwork + resources for growth

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a great location + recognition + rewards

Pfizer is a lot more than a pharmaceuticals and healthcare industry leader. It's a group of people dedicated to discovering, developing and marketing innovative pharmaceuticals, animal health and specialty chemical products that improve the quality of life worldwide. As a Fortune 100 company, Pfizer is committed to continuing its remarkable growth by investing more than half a billion dollars annually in research and development.

## BS/MS Scientists

If you have relevant laboratory experience and strong theoretical knowledge, take advantage of this opportunity to join multi-disciplinary teams in one of the following areas:

**Viral Immunology**—Evaluate efficacy and mode of action of novel immunostimulants in *in vivo* influenza A models. Experience in immune function assays, cell culture, *in vivo* modeling and biochemical techniques highly desired.

**Microbial Pathogenicity**—Study virulence factors that determine colonization and host immune responses to a novel gastrointestinal pathogen. An Immunology or Biochemistry background would be advantageous.

**Diabetes and Obesity**—Conduct studies elucidating mechanism controlling energy expenditure, insulin action or carbohydrate metabolism. Experience in Molecular Biology Techniques and/or *in vivo* modeling desired.

**Biochemical Toxicology**—Investigate mechanisms of chemical-induced toxicity using established and novel *in vivo* and *in vitro* methodologies. Experience in analytical methods development and instrumentation desired.

Our excellent benefits include competitive salaries, health and dental care, paid holidays and vacations, savings, investment and pension plans, and relocation assistance to our attractive Connecticut shore location.

To learn how you can be part of our success, please send your resume to: Mr. Kym Goddu, Central Research Division, Pfizer Inc, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.



Central Research

The elements of success.

## POSITIONS OPEN

**IMMUNOLOGY FACULTY.** Case Western Reserve University. Brand new research space is available for several immunologists to join an existing group of eight immunologists at the Institute of Pathology, Case Western Reserve University. Basic research in any area of immunology will be considered. For appointment as **ASSISTANT PROFESSOR** (tenure track), candidates should have completed a productive postdoctoral fellowship. For an appointment at the **ASSOCIATE** or **FULL PROFESSOR** level, candidates should have established a productive laboratory. Applicants should submit curriculum vitae, a brief description of past and current research and future plans, and the names of three references to: **Immunology Search Committee, c/o R. Zuppert, Institute of Pathology, Case Western Reserve University (CWRU), 2085 Adelbert Road, Cleveland, OH 44106. CWRU is an Equal Opportunity/Affirmative Action Employer.**

**ENVIRONMENTAL TOXICOLOGIST. ASSOCIATE/FULL PROFESSOR.** academic year appointment, tenure track, fall 1992. Minimum qualifications include a Ph.D. in a discipline related to the environmental toxicology of aquatic systems. Must complement interdisciplinary program in environmental quality and hazardous materials management. Evidence of strong established research program with extramural funding required. Expertise in the areas of measuring aquatic contamination and environmental impact and the ability to teach undergraduate and graduate courses is required. Applicants should send current curriculum vitae; names, addresses, and telephone numbers of at least five references; and documentation of funding and research to:

**Dr. Guy R. Lanza  
School of Public and Allied Health  
East Tennessee State University  
Box 70, 623  
Johnson City, TN 37614-0623**

The deadline for receiving completed applications is 15 March 1992. *An Equal Opportunity/Affirmative Action Employer.*

**ENTOMOLOGY CURATORIAL POSITION.** Responsibilities consist of collection-oriented research on systematics of a group of insects or arachnids, active participation in management of a major collection, development of external funding for research and collections, and participation in public program activities. Doctorate required. Special consideration given to specialists in orders other than Lepidoptera. **ASSISTANT, ASSOCIATE OF FULL CURATOR** level depending on qualifications. Send curriculum vitae, description of research interests, collection management and public program experience, grant/contract funding, names of three references, by 1 February 1992 to: **Dr. Charles Hogue, Entomology Section, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007; telephone 213-744-3363. An Equal Opportunity Employer.**

### TRINITY COLLEGE DANA PROFESSORSHIP

Supported by funds from the Charles A. Dana Foundation, Trinity College is seeking a senior faculty member interested in a visiting appointment to begin in the fall of 1992 or 1993. The Dana Professorship is designed to bring to the College a person whose field of expertise lies outside that of other members of the faculty. The fields in which we are currently interested are:

- (1) Anthropology (exclusive of European cultures).
- (2) Linguistics.
- (3) Science/technology and society.

Candidates should have records of distinguished teaching and scholarship; they should bring a special commitment to involving undergraduate students in the excitement of intellectual life while bridging disciplinary boundaries. The Dana Professor will be expected to give several public lectures and to lead faculty seminars as part of his or her duties, which include teaching two courses per semester. The term of the appointment is 1 to 3 years, and may be renewable. Salary and benefits are competitive.

Send letter, curriculum vitae, and names of three references to: **Professor David Robbins, Department of Mathematics, Trinity College, Hartford, CT 06106. Women and minority groups are especially welcome to apply.** The search committee will begin reading applications in January 1992.

*Trinity College is an Equal Opportunity, Affirmative Action Employer.*

## POSITIONS OPEN

### THE UNIVERSITY OF CALIFORNIA SAN FRANCISCO (UCSF) FACULTY POSITION IN CELL BIOLOGY

The Department of Anatomy and the Program in Cell Biology seeks exceptional candidates for a tenure track position at the level of **ASSISTANT OR ASSOCIATE PROFESSOR** in any area of modern cell biology including neuroscience, development, immunology, genetics and biological structure, starting after 1 July 1992. The candidates are expected to hold a Ph.D. and/or M.D. or equivalent, have had postdoctoral experience and demonstrated achievement in their fields, and outstanding potential for research and teaching. The successful individual will be expected to establish a rigorous, funded research program and to participate in teaching in the professional and graduate curricula. Applicants should submit curriculum vitae, a summary of research accomplishments, research plans and bibliography with copies of publications, and arrange to have three to five letters of recommendation sent to: **Chairperson, Cell Biology Search Committee, Department of Anatomy, University of California, San Francisco, CA 94143-0452.** Applications received after 1 February 1992 may not receive full consideration. *UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### ENDOWED CHAIR MOLECULAR GENETICS APPLIED TO CROP IMPROVEMENT UNIVERSITY OF MINNESOTA

The Department of Agronomy and Plant Genetics, University of Minnesota, invites nominations and applications for the newly established endowed chair in molecular genetics applied to crop improvement. The recipient of the chair will hold a tenured or tenure-track faculty appointment at a rank consistent with qualifications. The department intends that the position will be filled by an individual in the early to middle stages of career development. Candidates must have a doctoral degree and a background in plant biology with an interest in applications of molecular genetics to crop improvement. A minimum of 4 years of experience is necessary with evidence of major contributions, demonstrated excellence, and outstanding future potential in plant molecular genetics. The holder of the endowed chair position will be expected to provide leadership in research, teaching and graduate education. Research will emphasize the application of molecular genetics to soybean and cereal grain improvement. Interactions with plant breeders, plant physiologists, geneticists and molecular biologists as well as certain commodity groups are expected. Teaching will be in the area of plant molecular biology and genetics. The chair position is supported by an endowment with income of \$135,000 per year. Applications (including complete curriculum vitae, statement of research and teaching interest and the names and addresses of at least three references) are to be sent no later than 15 February 1992 to:

**Dr. Ronald L. Phillips  
Chair, Search Committee  
Department of Agronomy and Plant Genetics  
University of Minnesota  
St. Paul, MN 55108  
Telephone: 612-625-1213  
FAX: 612-625-1268**

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

**RESEARCH INSTRUCTOR.** Will participate in and direct laboratory work involving molecular characterization of human retroviruses which involves molecular cloning, nucleotide sequencing, eukaryotic expression, site-directed mutagenesis, PCR, and sterile cell culture techniques. The applicant will also work with infectious AIDS virus in an appropriate biosafety containment (P2-P3) laboratory. The applicant will research current literature on AIDS virus research and will supervise quality control and safety in the laboratory. M.D. or Ph.D. in microbiology/biochemistry with 1 year of experience in postgraduate research in molecular virology. Experience should include knowledge of molecular cloning, sequencing and PCR amplification of viral DNA and tissue culture of infectious virus. Forty hours per week, 8:00 a.m. to 5:00 p.m. Salary: \$31,636.25 per annum. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222. Re: Job Order #AL0626367.**

## POSITIONS OPEN

### TULANE UNIVERSITY FREEPORT-McMORAN CHAIR IN ENVIRONMENTAL POLICY

Tulane University's Center for Bioenvironmental Research announces the establishment of the Freeport-McMoRan Chair in Environmental Policy, and invites nominations and applications. Candidates should have earned a national reputation in a major area of environmental policy, as indicated by a strong record of research and publications. Specifically, we seek the following qualities:

Ph.D. or equivalent degree required; teaching experience strongly preferred; academic qualifications commensurate with a tenured appointment as full professor; a research record demonstrating integral knowledge of scientific issues and policy development in the environmental area; familiarity with the process of setting, implementing, and evaluating environmental policies; expertise in risk management, including risk assessment, and/or in the analysis of economic, political, social, legal aspects of environmental policy.

The chairholder will be a tenured member of the Tulane University faculty with an appointment in the appropriate academic department and also a member of the Center for Bioenvironmental Research. The center consists of faculty of Tulane and Xavier Universities from a broad range of academic disciplines. The chairholder will be expected not only to pursue significant research but to foster cooperative inter-disciplinary efforts among colleagues on this subject.

Letters of application or nomination should be accompanied by curriculum vitae and the names and addresses of three references. *Tulane University is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority group members are strongly encouraged to apply.*

Applications will be accepted until the position is filled. Interested scholars are encouraged to submit their materials as quickly as possible. All correspondence should be directed to:

**Professor James Wright  
Chair of Search Committee  
Freeport McMoRan Chair in  
Environmental Policy  
Department of Sociology  
220 Newcomb Hall  
Tulane University  
New Orleans, LA 70118**

### DIRECTOR OF ELECTRON MICROSCOPY LABORATORY AND PROFESSOR OR ASSOCIATE PROFESSOR OF BIOLOGICAL SCIENCES SEARCH REOPENED

The Department of Biological Sciences at Clemson University in cooperation with the Greenville Hospital System invites applications from outstanding electron microscopists for the Directorship of an EM laboratory and a senior faculty appointment at the level of professor or associate professor in the Department of Biological Sciences.

The successful candidate will be expected to direct a university-wide multiuser EM Laboratory equipped with scanning and transmission microscopes used for biological and materials research and to conduct an independent, extramurally funded research program in cell ultrastructure, developmental biology, or reproductive biology.

This is a unique opportunity to join a rapidly expanding department dedicated to achieving excellence in an integrated approach to ecosystems, organisms, cells, and molecules. A commitment has been made to provide substantial space and funds for the EM laboratory and the director's research laboratory. Applicants should send curriculum vitae, representative publications, a statement of research interest, and the names and telephone numbers of three references to: **Nancy C. Davies, Search Committee Coordinator, Department of Biological Sciences, Clemson University, Clemson, SC 29634.** All materials should be received by 15 January 1992 in order to assure consideration.

*Clemson University, the land-grant institution of South Carolina, is an Affirmative Action/Equal Opportunity Employer.*



# Bristol-Myers Squibb Pharmaceutical Research Institute

## RESEARCH SCIENTIST (Seattle, Washington)

**HIV VIROLOGY** – Conduct research in BL-3 facility with HIV. Specific responsibilities include assisting in generation, characterization and cloning of cell lines producing human monoclonal antibodies to HIV. You will also maintain virus stocks and cell lines used in HIV neutralization assays.

Candidates should have 5 years experience in HIV virology research which should include recent experience with biochemistry and monoclonal antibodies. Please reply to: **Bristol-Myers Squibb, Human Resources Department #910794, 3005 1st Ave., Seattle, WA 98121.**

## RESEARCH SCIENTISTS (Princeton, New Jersey)

### Metabolic Diseases

#### 2 Positions

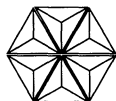
- Participate in a new project studying vascular wall biology and inflammatory mechanisms in atherosclerosis with particular focus on LDL oxidative modification and monocyte/macrophage involvement. This will entail the use of cellular, biochemical and molecular biology experimental approaches to develop new assays and methods to study atherogenesis. **Please reply to Dept. 266A-AR.**
- Participate in various aspects of cholesterol metabolism research. Requires a strong background in cellular biology to include experience with cultured cell lines, quantitation of ligand binding to cell receptors, and evaluation of intracellular transport processes. **Please reply to Dept. 266B-AR.**

## Cardiovascular Biochemistry 2 Positions

- Quantify mRNA growth factors, collagen and components of renin angiotensin system in animal models of heart failure and atherosclerosis. This will include Western blot analysis, enzyme assays and RIA procedures. **Please reply to Dept. 266C-AR.**
- Primary areas of involvement include molecular pharmacology of receptors including techniques to measure receptor signal transduction (Phospholipid Metabolism); receptor binding and molecular biology of receptors (Transient and Stable Expression of Receptor Genes). Requires experience in either molecular (cell biology) or biochemistry (signal transduction). **Please reply to Dept. 266D-AR.**

All above positions require a BS/MS in Biology, Biochemistry or Molecular Biology and 2-4 years of experience.

Please forward your resume (including Dept. #) to:  
**Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Dept., P.O. Box 4000, Princeton, NJ 08543-4000.** Equal Opportunity Employer, M/F/D/V.



**Bristol-Myers Squibb Company**

Department of Health & Human Services  
Public Health Service • National Institutes of Health  
National Institute on Deafness and Other  
Communication Disorders

## EPIDEMIOLOGIST

*Opening Date:* November 1, 1991

*Closing Date:* February 14, 1992

(All applications must be post-marked by the closing date.)

The National Institute on Deafness and Other Communication Disorders (NIDCD), National Institutes of Health (NIH), is recruiting for the position of Epidemiologist. The Institute conducts, fosters and supports research and research training on the causes, prevention, diagnosis and treatment of deafness and other communication disorders through intramural research and research grants and contracts.

The incumbent will serve as liaison with the National Center for Health Statistics (NCHS), responsible for all levels of planned collaborative project implementation including development of project plans, training of evaluation staff, reviewing of data and reviewing of coding procedures, etc. The incumbent will also utilize other existing data sources such as information from the individual states, or other national or international programs which are suitable to the needs of NIDCD's research programs.

This is a Civil Service position with an annual salary range of \$44,348 to \$68,229. Candidates must possess the knowledges, skills, and abilities (KSAs) appropriate to the position being filled. Experience and training must have been progressive and responsible, demonstrating good knowledge of principles, practices, methods and techniques in the field of epidemiology. (Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.)

Further information about the position, qualifications and KSA requirements may be obtained by contacting Ms. Gayle G. Mundell at (301) 402-0508 or TDD (301) 402-1134. Applicants should submit an SF-171 (Application for Federal Employment), Curriculum Vitae, Bibliography, and current performance appraisal to:

**Ms. Gayle Mundell**  
**Personnel Management Specialist**  
**National Institutes of Health**  
**National Institute on Deafness and**  
**Other Communication Disorders**  
**Building 31, Room 3C11**  
**9000 Rockville Pike**  
**Bethesda, Maryland 20892**



U.S. Citizenship Required  
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The Royal Society

## ROYAL SOCIETY UNIVERSITY RESEARCH FELLOWSHIPS

Applications are invited for about 20 Royal Society University Research Fellowships tenable in the first instance for five years from 1 October 1992 (or slightly later in the academic year 1992-93), with two possible further renewals for three and then two years. The Fellowships are available in any branch of science, including agriculture, medicine, mathematics, engineering and technology. The primary criterion for selection will be scientific merit based on record so far and on future potential. Some account will also be taken of the facilities and intellectual environment being offered by the prospective host department. Salaries will be on the non-clinical university scale, with London Allowance where appropriate. Annual research expenses (a sum of up to £10,000 may be sought in 1992-93) will be available, together with return travel and a contribution to baggage costs for successful applicants from overseas and their families.

Applicants should be scientists normally with between three and ten years of postdoctoral research experience. They must be British Citizens and propose to hold the fellowships in universities or polytechnics in the United Kingdom. Those who already have substantive posts in these places will not normally be considered. Previously unsuccessful applicants may apply again if still eligible, but should make fresh applications and arrange for updated referees' statements.

Application details are available (on written request only) from Mrs. U.M.A. Tokie, The Royal Society, 6 Carlton House Terrace, London, SW1Y 5AG (FAX: 071-930-2170). Closing date 14 February 1992. Application forms are not available after 31 January and applications arriving after 4 p.m. on 14 February will not be considered.

## POSITIONS OPEN



### THE ENVIRONMENTAL FATE AND EFFECTS DIVISION OFFICE OF PESTICIDE PROGRAMS U.S. ENVIRONMENTAL PROTECTION AGENCY

is seeking applications for an immediate opening for the position of **BRANCH CHIEF** of the Ecological Effects Branch. We are seeking a strong manager and an individual who is recognized as an expert in the areas of fisheries and wildlife biology, to lead, develop, oversee and act as a spokesperson for the scientific and regulatory policy work in the areas of ecological risk assessment and related areas. Additionally, the candidate should possess excellent writing and verbal communication skills. The individual should qualify for a biologist (Series 401) and have some background or experience in fisheries or wildlife biology or both. The position is at the GM-15 level (salary range: \$61,643 to \$80,138). Please send a completed, recent SF-171 (Application for Federal Employment) and a list of college courses to: Ms. Rachel Jones, Environmental Fate and Effects Division (H7507C) (Telephone: 703-305-6469), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. All applications should be postmarked no later than 15 February 1992. U.S. EPA is an Equal Opportunity Employer.

**PROFESSOR, HEAD OF NUTRITION AND EXERCISE RESEARCH PROGRAM.** The Pennington Biomedical Research Center (PBRC) and the Baton Rouge Campus of the Louisiana State University (LSU) seek scientist to direct a new Program in Nutrition and Physical Fitness. State-of-the-art facilities and generous equipment allowance available to support Director. Faculty responsibilities are in the Department of Kinesiology. Must have 5 years of postdoctoral experience, evidence of scholarly productivity. Send résumé and application letter by 30 January 1992 to: Evelyn Bennett, Human Resource Management, Pennington Biomedical Research Center, 6400 Perkins Road, Baton Rouge, LA 70808. Ref: EX106225. LSU/PBRC is an Equal Employment Opportunity/Affirmative Action Employer.

**COGNITIVE NEUROSCIENCE.** The Department of Psychology at Carnegie Mellon University invites applications from cognitive neuroscientists for a **FACULTY POSITION** preferably at, but not necessarily limited to, the junior level. Cognitive neuroscience at Carnegie Mellon is characterized by attempts to arrive at cognitive theories derived from consideration of the computational properties of neural circuitry, from patterns of damage following brain injury, and from the postnatal development of the brain. A variety of different techniques ranging from connectionist modeling to animal studies are currently utilized. In the near future opportunities for PET scanning will also become available. This hiring is part of a plan to make cognitive neuroscience an independent "track" within the department. Please send curriculum vitae, statement of research interests, representative papers, and three letters of recommendation to: **Cognitive Neuroscience Search Committee, Department of Psychology, Carnegie Mellon University, Pittsburgh, PA 15213-3890.** Application deadline: 1 February 1992. *Affirmative Action/Equal Opportunity Employer.*

The Illinois College of Optometry in Chicago seeks an individual (no later than 1992-93 academic year) to **TEACH BIOCHEMISTRY** to students in the first year of the optometry program and to fill supervisory role for team which teaches ocular vegetative physiology. Candidates must possess Ph.D. or D.Sc. in biochemistry, immunology or physiology and will be expected to develop a research program centered on human subjects in one of the following areas: clinical trials; general physiology; the physiology of stress; or vegetative ocular physiology. The candidate will be expected to serve as a mentor for (selected) junior clinical faculty who wish to develop their research skills. Salary competitive, benefits excellent, rank commensurate with experience. Please submit detailed curriculum vitae to: **David A. Greenberg, O.D., M.P.H., Vice President for Academic Affairs/Dean, Illinois College of Optometry, 3241 South Michigan Avenue, Chicago, IL 60616** no later than 1 March 1992. *The Illinois College of Optometry is an Affirmative Action, Equal Opportunity Employer.*

## POSITIONS OPEN

**FACULTY POSITIONS.** Cornell University's Division of Nutritional Sciences invites applications for two, tenure-track positions; nutritional aspects of mammalian biochemistry/molecular genetics/cell biology. Successful candidates expected to develop a strong research program in nutrition suitable for training graduate students, to attract external funding to support this research program, and to participate in the division's undergraduate/graduate teaching program. Research programs with relevance to nutritional issues at the molecular, cellular, or organismal level expected.

Qualifications: Ph.D. or M.D. or equivalent doctoral degree; postdoctoral experience and demonstrate potential for outstanding accomplishments in research and teaching. Position available 1 August 1992. Rank and competitive salary commensurate with background and experience. Attractive benefits available. Qualified applicants should submit curriculum vitae, list of publications, statement of research and teaching interests, and names/addresses of three references to: **Dr. Kathleen M. Rasmussen, Search Committee Chair, Division of Nutritional Sciences, Cornell University, 111 Savage Hall, Ithaca, NY 14853-6301.** Application deadline: 28 February 1992. *Affirmative Action/Equal Opportunity Employer.*

### SWARTHMORE COLLEGE DEPARTMENT OF BIOLOGY ONE-YEAR FACULTY POSITIONS

Applications are invited for three 1-year leave-replacement positions in the Department of Biology starting September 1992.

#### NEUROBIOLOGY

This position involves teaching an intermediate-level course in neurobiology and an advanced-level seminar course in some area of neuroscience, and participating in the department's introductory biology sequence.

#### ANIMAL BEHAVIOR

Scientist with field experience to teach an intermediate-level course in primate behavior and an advanced-level seminar in behavioral ecology, and to participate in the department's introductory biology sequence.

#### PLANT ECOLOGY

This position involves teaching an intermediate-level course in ecology and an advanced-level seminar in some area of plant ecology, and participating in the department's introductory biology sequence.

Send curriculum vitae and three letters of recommendation to the **Chair of the appropriate search committee (neurobiology, animal behavior or ecology), Department of Biology, Swarthmore College, 500 College Avenue, Swarthmore, PA 19081-1397.** Closing date for applications is 1 February 1992. *Swarthmore College is an Equal Opportunity Employer.*

### THE UNIVERSITY OF CALGARY FACULTY POSITIONS IN NEUROSCIENCE RESEARCH

The University of Calgary Neuroscience Research Group is seeking highly qualified, independent investigators. Candidates should have a Ph.D. with 2 years' postdoctoral experience. Major interests of the multidisciplinary group include developmental neurobiology, regeneration and restorative neurology, the molecular basis of neurodegenerative diseases, the cellular basis of vision and its disorders, cellular bases of learning and memory, ion channel/biophysics, cellular pharmacology and neurotoxicology, motor control, and the control of fever.

The chosen applicants must compete successfully for salary and establishment awards from the Alberta Heritage Foundation for Medical Research, and will have 75% of time protected for research. Rank and salary commensurate with experience and qualifications.

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal people, visible minorities, and people with disabilities.*

Please send curriculum vitae, statement of research interests, and the names of three referees by 31 December 1991, to:

**Dr. R. Hawkes, Chair  
Neuroscience Research Group  
The University of Calgary  
3330 Hospital Drive N.W.  
Calgary, Alberta T2N 4N1 Canada**



## OPPORTUNITIES IN CHEMICAL BIOTECHNOLOGY

### **Microbiologist/Microbial Enzymologist**

Ph.D. Microbiology with 3+ year biotechnology industrial experience with enzyme/whole cell biotransformations to design and develop biocatalytic systems for the production of chiral chemical intermediates and products for the pharmaceutical, agricultural and food industries. Must be capable of taking a scientific concept through to industrial process.

### **Microbiologists/ Biochemists**

BS/MS Microbiology or Microbial Biochemistry with experience with microorganisms, enzymes and HPLC, GC, UV. Strong organic chemistry background with industry experience preferred.

### **Biochemist/ Organic Chemist**

Experienced MS or Ph.D. Biochemist/Organic Chemist to be involved in the application of biocatalysis for production of chiral amines & other chemicals. Analytical experience, particularly chiral, is essential. A background in the use of enzymes for organic synthesis is preferred.

### **Process Chemist**

MS or Ph.D. in Organic Chemistry with solid analytical capability to work independently on synthetic chemical process development for the manufacture of racemic and chiral amines and other chemicals.

### **Production Chemist**

BS/MS Organic Chemistry or Chem.E. with strong organic background, plus 3-5 years hands-on experience with pilot operations and analytical procedures within the pharmaceutical or fine chemical industry.

*Celgene Corporation is committed to the leadership position in chemical biotechnology. Building on recent success, we seek independent self starters to join our Chiral Chemicals Group. Celgene offers competitive salaries and benefits, including Educational Assistance and a 401(K) program. Our modern facility in Central NJ, an hour from NYC and Philadelphia, provides an attractive environment conducive to personal growth and scientific achievement. Qualified applicants should send a detailed resume to, Manager HR Dept. CEN, Celgene Corp., 7 Powder Horn Drive, Warren, NJ 07059 USA. EO/EF*

### **Dean of the Graduate School and Vice President for Research**

As a result of administrative restructuring, Tulane University invites nominations and applications for a new position: Dean of the Graduate School and Vice President for Research. A terminal degree and a distinguished scholarly record are required; administrative experience is preferred. Priority consideration will be given to candidates in the Physical, Natural, or Engineering Sciences. Appointment is expected to begin no later than 1 July 1992.

As Dean this individual will have administrative responsibilities for admissions, financial aid and monitoring of approximately 1,000 students enrolled in the Graduate School. Working with the Graduate Council, he or she will coordinate curriculum development and program review with the forty departments offering programs on the masters and doctoral levels. He or she will be the chief administrative officer representing the Graduate School, consisting of 350 members from the Faculty of the Liberal Arts and Sciences, the School of Engineering, the A.B. Freeman School of Business, the School of Medicine and the School of Public Health and Tropical Medicine.

As Vice President for Research he or she will be responsible for fostering scholarly activity, seeking support for it, and administering research support programs. The Directors of the Office of Research and Project Administration, the Office of Technology Transfer, and other offices related to scholarly activity will report to this individual. He or she will work closely with the Committee on Research in administering summer research support and other programs, and committees related to the fostering of scholarly inquiry and the administration of funded research. Knowledge of funding sources is essential.

Nominations and applications are due by January 15, 1992. All applications should be accompanied by a c.v. and the names of four professional references. Correspondence should be addressed to:

Richard Gonzalez, Chair  
Search Committee  
Office of the Provost  
200 Gibson Hall  
Tulane University  
New Orleans, LA 70118

Tulane University is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority members are particularly invited to apply.

## **DIRECTOR, ADDICTION RESEARCH**

Applications are being accepted for the position of Director, Addiction Research at the rank of tenured associate or full professor. This position will involve close interaction with the Departments of Molecular Biology and Psychiatry, with full appointments in one or both departments. Appointments in other clinical departments may also be considered.

This position involves 3 aspects: (1) basic research in drug addiction, (2) teaching Medical Pharmacology, (3) administrative responsibilities in the development and evaluation of treatment programs for drug addiction.

A PhD, or equivalent degree, plus a record of research excellence (as exemplified by national recognition in literature, funding agencies and professional organizations), and a proven track record of administrative capabilities is required.

Consideration will be given to applicants with research strengths in the central nervous system, pharmacology and/or behavioral aspects. Candidates applying molecular biology techniques to the study of drug addiction are urged to apply.

Excellent start-up funds are available, including space in the Basic Science Department; seed money for equipment/supplies and junior faculty positions.

As a result of expansion and growth of its research and teaching facilities, the University of Medicine & Dentistry of New Jersey-School of Osteopathic Medicine is also actively recruiting basic scientists and clinical faculty. The main campus, located in Stratford, NJ, is 30 miles East of Philadelphia and is convenient to many Northeast and Mid-Atlantic cities.

The University offers an excellent salary and benefits package. For consideration, please submit your CV and 3 references to: **R. Michael Gallagher, DO, Associate Dean for Clinical Affairs, UMDNJ-SOM, 401 S. Central Plaza, Stratford, NJ 08084.** The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.



## University of Copenhagen

Applications are invited for the position as professor in Animal Physiology at the Zoophysiological Laboratory A, August Krogh Institutet, University of Copenhagen. Be appointed by the 1st of July 1992.

Candidates should have research experience in organ and/or whole physiology and be engaged in original investigations to elucidate basic animal physiological principles. Emphasis will also be placed on documented understanding of physiological problems in a broad sense and ability to teach at two or more levels of organization between ecological physiology and cellular physiology. Current research at the laboratory ranges from biophysical and cell physiological characterization of epithelia to the interplay between organisms and their environment. The candidate is expected to participate in fruitful collaboration with the staff at the laboratory and with other staff members at the August Krogh Institute. The research areas of the August Krogh Institute range from biochemistry to human physiology.

Further information about the position, research planning, facilities, and staff can be obtained from the Chairman of the Zoophysiological Laboratory A, or from the Chairman of the August Krogh Institute (13 Universitetsparken, DK-2100, Copenhagen Ø, Denmark.)

The Professor will participate in the Department's teaching at all levels. The language of instruction is Danish, but English will be accepted for the first two years of the appointment.

The Professor will be appointed as a Civil Servant under the Ministry of Education and Research. The salary scale is 361,079.59 Danish kroner per annum.

Applications should include a current *curriculum vitae*, a complete list of publications, copies of the scientific publications and further documentation which the applicant wishes to be considered, and a brief outline of proposed research. Information concerning the applicant's teaching experience, which will be evaluated by the Study Board, should also be enclosed. All material should be submitted in triplicate together with a complete list of the enclosed material.

After evaluation of the applicants qualifications by a Search Committee, the report will be sent to all applicants in complete form.

Applications are to be addressed to Her Majesty the Queen of Denmark and sent to the Faculty of Natural Sciences, Panum Institutet, Blegdamsvej 3, DK-2200 Copenhagen N, Denmark.

The closing date for receipt of applications is 6th January 1992.

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## Colloquium Announcement

### MASTERMINDING THE BRAIN

January 17, 1992.

*A full day colloquium on brain receptor research and its role in understanding and treating addiction and behavioral disorders featuring a unique gathering of leaders in the field.*

*Presented by The Franklin Institute in conjunction with the presentation of the 1991 Bouwer Award and Prize for Achievement in Science to Solomon H. Snyder, M.D.*

#### Opening Remarks

C. Everett Koop, M.D., former U.S. Surgeon General  
Julius Axelrod, Ph.D., National Institutes of Health  
Solomon H. Snyder, M.D., Johns Hopkins University

#### The Brain and Receptors

Perry B. Molinoff, M.D., University of Pennsylvania  
Robert J. Lefkowitz, M.D., Duke University  
Richard Axel, M.D., Columbia University  
Paul Greengard, Ph.D., Rockefeller University  
Anne B. Young, M.D., Ph.D., Harvard Medical School

#### Brain Receptors and Therapies

Seymour Kety, M.D., National Institute of Mental Health  
Peter Whybrow, M.D., University of Pennsylvania  
Eric R. Kandel, M.D., Columbia University  
Charles O'Brien, M.D., University of Pennsylvania  
Frederick K. Goodwin, M.D., NIAAA  
Joseph Coyle, M.D., Harvard Medical School

#### For further information, contact:

Larry E. Tise, Ph.D., Executive Director  
The Benjamin Franklin National Memorial  
The Franklin Institute  
20th Street at the Benjamin Franklin Parkway  
Philadelphia, PA 19103  
215.448.1329, FAX 215.448.1364



The  
Franklin Institute

## FACULTY POSITIONS IN BIOCHEMISTRY

### St. Jude Children's Research Hospital

St. Jude Children's Research Hospital, a private research institute, is engaged in a major expansion of its facilities and scientific activities. A new research building opened in August, 1991 which provides 240,000 square feet of new laboratory space to house the institute's basic science programs. As part of this expansion, new faculty positions are now available in the Department of Biochemistry. Although preference will be given to applicants who have recently completed postdoctoral training and are seeking positions at the level of Assistant Member, more senior investigators with appropriate research interests and qualifications will be considered for positions of higher faculty rank. Candidates with programs focusing on the regulation of cell growth, differentiation and transformation, the biochemistry and molecular biology of signal transduction, and mechanisms of gene regulation are particularly encouraged to apply. Opportunities exist for collaborative interactions with ongoing basic research programs in Virology and Molecular Biology, Immunology, Tumor Cell Biology, and Pharmacology, as well as with clinical investigators in Hematology/Oncology and Infectious Diseases. In addition to new facilities and excellent start-up funds, salaries are nationally competitive and include a generous benefits package. A strong institutional commitment to its faculty ensures stability in program development and continuity of research activities.

Applicants should submit a curriculum vitae, a letter summarizing their research accomplishments and goals, and the names of three references to:

**Dr. James N. Ihle**  
Chairman, Department of Biochemistry  
St. Jude Children's Research Hospital  
332 N. Lauderdale  
Memphis, TN 38105 USA

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OPPORTUNITY EMPLOYER*



## Graduate School Dean



The Medical College of Wisconsin is seeking a Dean of the Graduate School.

Responsibilities of the position include:

- Providing a vision for further growth of the School.
- Improving the identity and quality of existing graduate programs.
- Developing interdisciplinary graduate programs.
- Serving as a senior administrative official.
- Supervising the Graduate School Administrative Office.

Qualifications of candidates should include:

- Ph.D. in a medically-related science.
- Active research career.
- A minimum of five years administrative experience.
- Proven ability to work collegially with administration, faculty and students.

This position offers the opportunity to guide a biomedical graduate program that is growing in both size and quality. It will require a 60% full-time effort. The remaining 40% of time will be available for research in the applicant's academic discipline, for which an appropriate academic appointment is available. Address inquiries to: Graduate School Dean Search Committee, Office of Faculty Affairs, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226

Equal Opportunity/Affirmative Action Employer M/F/H

## HEALTH SCIENTIST ADMINISTRATOR IN CYSTIC FIBROSIS

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) seeks a scientist (Ph.D., M.D., or equivalent) with a track record of research accomplishment in cell and/or molecular biology and excellent interpersonal and written communications skills to serve as Health Scientist Administrator (GS-12-13-14) for its Cystic Fibrosis Program and a component of its Metabolic Diseases Research Program. The position involves scientific administration of grants and contracts, program planning and development, close interaction with leading researchers, and the opportunity to organize and/or attend scientific meetings. The position is currently available at a salary range of \$37,294 to \$68,129 per annum. Please submit an Application for Federal Employment (SF-171) and/or CV and bibliography by January 1, 1992 to:

Judith E. Fradkin, M.D.  
Chief, Endocrinology and Metabolic  
Diseases Programs Branch  
National Institute of Diabetes  
and Digestive and Kidney Diseases  
National Institutes of Health  
Westwood Building, Room 603  
5333 Westbard Avenue  
Bethesda, MD 20892



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## GRADUATE TRAINING IN VIRAL ONCOLOGY AND IMMUNOLOGY

Stipends are available for students pursuing a Ph.D. in molecular oncology or immunology beginning September 1992. The principal interests of participating faculty are viral and cellular oncogenes, growth control, and molecular, cellular, and tumor immunology.

Students will be supported chiefly by an NIH programmatic training grant, requiring US citizenship, or resident status. We strongly encourage applications from minority students. Limited funding is also available outside of this source. Information and application forms are available from: **Dr. R.B. Carroll, Graduate Student Advisor, Department of Pathology, New York University Medical School, 550 First Avenue, New York, NY 10016.**

NYU is an Equal Opportunity Employer.

## ALL SOULS COLLEGE, OXFORD

### SENIOR RESEARCH FELLOWSHIP IN THEORETICAL SCIENCES

The College intends to elect a Senior Research Fellow in the Theoretical Sciences tenable with effect from 1st October 1992 (or a mutually agreed earlier or later date).

The Theoretical Sciences Research Fellowship is open to men and women whose work lies within the fields of the physical and biological sciences broadly defined.

The College regards a Senior Research Fellowship as being of comparable academic standing to an Oxford University Professorship, and applicants are expected to have a correspondingly distinguished record of achievement in research.

Senior Research Fellowships are normally held until retirement age (subject to renewal by the College every seven years and the requirements of the Education Reform Act, 1988). The total emoluments are comparable to those of a University professor.

Further particulars, including details of emoluments and terms of appointment, application forms, and copies of a memorandum for referees may be obtained from the Warden's Secretary, All Souls College, Oxford OX1 4AL, England. Applications, on the application form, should reach the Warden not later than 1st February 1992 (the envelope containing the application to be marked "Senior Research Fellowship"). Applicants are asked to ensure that references, from not more than three referees, also reach the Warden by 1st February 1992.

## POSITIONS OPEN

### ACADEMIC POSITION PESTICIDE CHEMIST OR TOXICOLOGIST

The Pesticide Chemistry and Toxicology Laboratory in the Department of Entomological Sciences of the University of California at Berkeley invites applications for a professional research chemist or toxicologist position. Applicants must hold a Ph.D. or equivalent degree in chemistry, biochemistry, toxicology or related fields and must have extensive experience in multidisciplinary research on organic toxicants. Responsibilities of the successful candidate include: conducting cooperative research on the degradation and action of pesticides and other toxicants; developing new instrumental approaches in chemical and biochemical research; coordinating activities of the Pesticide Chemistry and Toxicology Laboratory. Position starts 1 February 1992 or a mutually agreeable time thereafter at an appointment level (associate or full professional researcher in the non-tenure series on a full-time fiscal year basis) and starting salary dependent upon qualifications. To assure full consideration applicants should submit curriculum vitae, publication list, college transcripts, and names of three professional references by 1 January 1992 to: Dr. John E. Casida, Pesticide Chemistry and Toxicology Laboratory, Department of Entomological Sciences, 114 Wellman Hall, University of California, Berkeley, CA 94720. Telephone: 510-642-5424. FAX: 510-642-6497. The University of California is an Equal Opportunity/Affirmative Action Employer.

### MOLECULAR VIROLOGIST

The Department of Medical Microbiology and Infectious Diseases, University of Alberta, invites applications for a FACULTY POSITION in virology.

Applicants should have a Ph.D. degree with at least 3 years of postdoctoral research experience. The successful candidate is expected to develop a strong extramurally funded research program in the area of molecular virology. Priority will be given to individuals with expertise in the application of molecular approaches to the understanding of pathogenesis of retroviral diseases. Up to 75% of time will be devoted to research, with the remaining time available for participation in undergraduate and graduate teaching, including the supervision of graduate students. Salary and rank will be commensurate with training and experience. Annual salary range for 1991/92: Assistant Professor C\$38,995 to C\$55,755; Associate Professor C\$48,083 to C\$70,331; Professor C\$60,083 minimum. The successful candidate will be eligible to apply for salary and establishment funding support by competitive application from the Alberta Heritage Foundation for Medical Research.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

The closing date for application is 15 January 1992.

Please send applications consisting of detailed curriculum vitae, statement of research program, reprints of applicant's five most significant publications and the names of three referees to: Dr. David L. J. Tyrrell, Chairman, Department of Medical Microbiology and Infectious Diseases, 1-41 Medical Sciences Building, University of Alberta, Edmonton, Alberta, T6G 2H7, Canada.

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

**DOCTORAL PROGRAM IN MICROBIOLOGY AND MOLECULAR GENETICS** seeks quality candidates to study molecular genetics, virology, immunology, pathogenic microbiology, microbial biochemistry, biotechnology, and applied and environmental biology in a cooperative program between Rutgers, The State University of New Jersey, and the University of Medicine and Dentistry of New Jersey. Ninety faculty from various university departments, research centers and institutes participate in the program to provide excellent research training and employment opportunities. Fellowships, assistantships and scholarships provide up to \$12,000 stipend plus tuition to qualified applicants on a competitive basis. Contact: Dr. Alan D. Antoine, Graduate Program in Microbiology and Molecular Genetics, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903. Telephone: 908-932-9881, or FAX: 908-932-1262.

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## POSITIONS OPEN

### LECTURER INTRODUCTORY BIOLOGY LABORATORIES DEPARTMENT OF BIOLOGY THE UNIVERSITY OF MICHIGAN

The Department of Biology at the University of Michigan announces the availability of a non-tenure-track lecturer position. The term of appointment is for a period of 3 years and is subject to renewal based on an evaluation of performance and continuing needs. The lecturer will serve as coordinator and supervisor of instruction in introductory laboratory course in biology. A relevant Ph.D. degree is required, along with experience in teaching undergraduate courses in biology. In addition to general supervisory matters, duties will include working with faculty to update laboratory experiments and training of graduate student teaching assistants who serve in the laboratories. Appointments are on a 12-month basis and include a liberal benefits package. This position is available 1 August 1992, and the deadline for receipt of applications is 14 February 1992. Applicants should provide curriculum vitae and three letters of recommendation to:

Dr. B. A. Hazlett  
Department of Biology  
The University of Michigan  
Ann Arbor, MI 48109-1048

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Join us in a creative school environment where you can apply your science background and influence receptive minds. Chemistry teaching position available immediately in a small, progressive alternative public high school. Ability to teach other subject areas and advise teens desirable. Send résumé to: Nova, 2410 East Cherry, Seattle, WA 98122. Telephone: 206-281-6363. Deadline: 13 December 1991.

### PREDOCTORAL TRAINING IN NEUROSCIENCE



### NEUROSCIENCE CENTER OF EXCELLENCE LOUISIANA STATE UNIVERSITY (LSU) MEDICAL CENTER SCHOOL OF MEDICINE NEW ORLEANS

The Neuroscience Center of Excellence in New Orleans is accepting inquiries concerning graduate training leading to a Ph.D. in neuroscience. The Neuroscience Center is an interdisciplinary unit of the Medical School with over 40 basic and clinical neuroscience faculty whose research expertise extends from molecular to behavioral neuroscience. The curriculum of this new and exciting Ph.D. program reflects this comprehensive range of research interest and activity. The program will start in the fall of 1992. Generous stipend support is available on a competitive basis. Highly qualified individuals should send inquiries about the program to: Dr. Nicolas G. Bazan, Director, Neuroscience Center of Excellence, 2020 Gravier Street, LSU Medical Center, New Orleans, LA 70112 or telephone: 504-568-6700, ext. 321; FAX: 504-568-5801.

**POSTDOCTORAL POSITION** available to study gene regulation in response to environmental signals using molecular, genetic, and biochemical approaches. A focus of the group is the characterization of OxyR, a transcription factor regulated by oxidation and reduction [Science 248, 189 (1990)]. Background in molecular biology or inorganic chemistry desirable. Send curriculum vitae to: Dr. Gisela Storz, National Institutes of Health, Cell Biology and Metabolism Branch, National Institute of Child Developmental Health and Human Development, 9000 Rockville Pike, Building 18T, Room 101, Bethesda, MD 20892. NIH is an Equal Opportunity Employer.

## POSITIONS OPEN

**TWO POSTDOCTORAL POSITIONS** available immediately to study the molecular biology of RNA viruses, with emphasis on molecular genetic approaches to investigate virus replication mechanisms and evolution during natural infections. Starting salaries are \$24,000 per year. The duration of this position is limited to 3 years. Send curriculum vitae, official transcripts and three letters of reference by 30 December 1991, to: Dr. Stuart Nichol, Department of Biochemistry/200, University of Nevada, Reno, NV 89557-0014. Equal Opportunity Employer/Affirmative Action.

**POSTDOCTORAL POSITION.** NIH-funded project to study protein structure with an emphasis on the development of computational tools for protein structure prediction. In particular, our group is interested in applying neural networks and symbolic calculations to the secondary structure prediction problem. We are also investigating the modeling of parasitic serine and cysteine protease structures by homology to proteases of known structure. Please send curriculum vitae, a brief description of research interests, and two letters of recommendation to: Dr. Fred E. Cohen, Department of Pharmaceutical Chemistry, University of California, San Francisco (UCSF), CA 94143-0446. UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

**POSTDOCTORAL POSITION** is available in an atherosclerosis research group. Areas of investigation include platelet, monocyte, and vascular cell function; arachidonic acid metabolism and lipid mediators of cell function; and factors associated with accelerated vascular disease in the diabetic population. Send curriculum vitae and names of three references to: Victor A. Skriniska, Ph.D., Department of Health Sciences, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, WI 53201.

**POSTDOCTORAL POSITION IN YEAST GENETICS AND MOLECULAR BIOLOGY.** Candidate to study the *Saccharomyces cerevisiae* mRNA transcription apparatus with emphasis on RNA polymerase II subunits [Trends Biochem. Sci. 15, 347-351 (1990)]. Experience in molecular biology is essential; yeast experience is helpful. The Roche Institute of Molecular Biology is an independent research institute funded by Hoffmann-La Roche, and is located 10 miles west of New York City. The institute has an academic setting with exceptional resources and competitive salaries. Please send curriculum vitae and the names of three references to: Dr. Nancy Woychik, Roche Institute of Molecular Biology, Nutley, NJ 07110. We are an Equal Opportunity Employer.

### POSTDOCTORAL POSITIONS

Challenging studies in multidisciplinary environment. Investigating endocytic and secretory pathways important in interaction of mammalian cells with toxins, viruses, and hormones; identifying and characterizing molecular targets, structure-function analyses. Study of genes governing regulation of protein synthesis. Equipped for all advanced molecular, genetic, protein biochemical, immunological techniques. Approaches include gene cloning, sequencing, PCR, site-directed mutagenesis, transfection analysis. Applicants with backgrounds in eukaryotic molecular biology/protein chemistry preferred. Send curriculum vitae, research experience, publications, three references to: Dr. Thomas Moehring, Department of Microbiology and Molecular Genetics, and Markey Center for Molecular Genetics, University of Vermont, Burlington, VT 05405. An Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITIONS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY VANDERBILT UNIVERSITY

Positions are available April 1992, to isolate developmentally regulated genes disrupted in murine embryonic stem cells and to study gene functions in nullizygous animals. Experience in molecular biology, particularly with constructing genomic and cDNA libraries, is desirable.

Please send an application letter, curriculum vitae and three letters of recommendation to: Dr. H. Earl Raley, MIT Center for Cancer Research, Building E17-Room 517, 77 Massachusetts Avenue, Cambridge, MA 02139. Equal Opportunity Employer.

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## PHARMACOLOGIST

### Immunosciences

We are currently seeking a Ph.D. Pharmacologist interested in drug discovery and familiar with inflammatory and allergic models of human disease. Publication within the above is definitely a plus. The selected candidate must be able to supervise assistants and work closely with associates in a multi-disciplinary team. Job #RB7613.

## ASSISTANT PHARMACOLOGIST

We require a degree in the biological sciences, a strong interest in pharmaceutical research, and some experience in a research environment in an *in vivo* situation. Background involving computer assisted data analysis and/or biochemical assays is preferred, and research experience with inflammation models would be a definite advantage. Job #53559.

Abbott offers an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. For consideration, please send your resume (indicating the appropriate Job #) with salary history to: **Patricia Handy, Corporate Placement, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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## Program Manager, Ocean Optics

The Office of Naval Research is seeking a highly qualified individual to plan and manage a contract research program in optical oceanography. The sponsored research is conducted principally at universities and private laboratories, with research performed by leading scientists in the field. This is a Civil Service position at the GM-14 or 15 level (\$52,406-\$80,138), depending on qualifications.

The individual selected will establish goals for and conceive, organize and direct research and development programs in new areas of optical oceanography with emphasis on theoretical and experimental aspects of oceanographic radiative energy transfer, ocean color, visibility/imaging, and particulate optics. The incumbent will identify new research opportunities, communicate ONR interests to the scientific community, evaluate and select research proposals for funding, manage available resources, and represent the program within the Navy and DoD. This position provides the challenge and opportunity to have a creative and significant impact on the direction and quality of research conducted at the national level. Additionally, the opportunity exists to establish or maintain an individual research program at an academic institution or government laboratory.

Applicants must have a P.h.D. or equivalent training in optical oceanography or in an area related to optical oceanography, and at least one year of professional experience or an equivalent combination of education and experience. To be qualifying, this experience must have been at a level of difficulty and responsibility equivalent to that of the next lower grade in the Federal Service. Demonstrated research experience is preferred.

Interested persons should send a resume, list of publications and a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to: **OFFICE OF THE CHIEF OF NAVAL RESEARCH, Civilian Personnel Division, OCNR Code 01242, Attn: Announcement #91-46 (S), 800 North Quincy Street, Arlington, VA 22217-5000.**

Applications will be accepted through 31 January 1992 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (703) 696-4705 or TDD (703)696-2681.

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For more information and an application contact:

Admissions Office, GPEP Program  
**University of Osteopathic Medicine  
and Health Sciences**

3200 Grand Avenue  
Des Moines, IA 50312-4198  
(515) 271-1450 or 271-1614

## NANOTECHNOLOGY

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This 42-page special section, reprinted from the 29 November issue of *SCIENCE*, is your entry to the expanding world of small-scale engineering. It's a field that spans microelectronics, materials science, chemistry, molecular biology, and microscopy. In this special section, ten illustrated articles by research leaders and by science journalists present the full scope of this small world.

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## POSITIONS OPEN

### POSTDOCTORAL POSITION

A postdoctoral position is available to study molecular mechanisms governing progression of human malignant melanoma. Areas of particular interest include the isolation and analysis of genes expressed in primary and metastatic melanomas. Expertise in the area of molecular biology is essential. Interested candidates should send curriculum vitae and names of three references to: **Dorothea Becker, Ph.D., University of Pittsburgh, Department of Medicine, Biomedical Science Tower, E1057, Pittsburgh, PA 15261.**

**POSTDOCTORAL FELLOWSHIPS** in atherosclerosis research in two areas: (1) function/regulation of cholesterol ester hydrolases and their role in the dietary absorption and subsequent cellular storage of sterols [*PNAS* 86, 6913 (1989)]; (2) secretory control of atherogenic lipoproteins and their molecular interactions with the cell surface [*JBC* 265, 16741 (1990); *J. Clin. Invest.*, October 1991, in press]. Techniques used include cell and molecular biology, as well as transgenic models. Positions supported by NIH training grant with supplementation of stipend. *Must be permanent resident/ U.S. citizen.* Send curriculum vitae and names of three references to either **Dr. E. A. Fisher or Dr. K. J. Williams, Department of Biochemistry, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129. FAX: 215-843-8849.**

**POSTDOCTORAL FELLOWSHIP.** Position available for biochemist/cell biologist to study growth factor receptors and related proteins. Previous experience in protein purification/cell biology is desirable. Submit curriculum vitae and names of three references to: **Coriell Institute for Medical Research, Personnel Department, 401 Haddon Avenue, Camden, NJ 08103. Equal Opportunity Employer/Affirmative Action.**

### SMITHSONIAN POSTDOCTORAL FELLOWSHIPS IN MOLECULAR EVOLUTION AND PLANT PHYSIOLOGY

Postdoctoral fellowships in molecular evolution and plant physiology are available for research to be conducted at one or more of the following Smithsonian Institution bureaus: National Museum of Natural History (Washington, D.C.); National Zoological Park (Washington, D.C.); Smithsonian Tropical Research Institute (Panama). In addition a portion of the research may be conducted at the Smithsonian Environmental Research Center (Maryland). Stipends are \$24,000 annually, including travel. Tenures are from 12 to 24 months. Deadline: 15 February 1992. For information and applications write: **Office of Fellowships and Grants, Desk MS, Smithsonian Institution, Washington, DC 20560.**

### HARVARD MEDICAL SCHOOL MASSACHUSETTS GENERAL HOSPITAL (MGH) POSTDOCTORAL FELLOW

Position available immediately to study tumor microcirculation and pathophysiology. Areas of interest include ratio imaging (in vitro and in vivo), photobleaching, mathematical modeling, and cellular biophysics. Experience with video microscopy and computer-assisted image analysis is highly desirable. A 2-year (extendable) commitment is required, with salary commensurate with experience. *Harvard-MGH is an Affirmative Action, Equal Opportunity Employer. Applications from women and minority group members are welcome.* Please submit curriculum vitae and three references within 3 weeks to: **Professor Rakesh K. Jain, Radiation Oncology, Harvard Medical School—Massachusetts General Hospital, Boston, MA 02114.**

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## POSITIONS OPEN

### ATMOSPHERIC SCIENCES POSTDOCTORAL FELLOWSHIPS NCAR/ADVANCED STUDY PROGRAM

Each year the National Center for Atmospheric Research (NCAR) provides a limited number of postdoctoral fellowships for talented scientists to pursue research interests and develop expertise in new areas. Ph.D. physicists, chemists, applied mathematicians, engineers, and specialists from disciplines of biology, geology, science education, economics, geography and atmospheric science apply their training to research areas of atmospheric dynamics (on all scales) and models, climate science, cloud physics, atmospheric chemistry and radiation, turbulence, upper-atmosphere physics, solar and solar-terrestrial physics (including ionospheric studies and aeronomy), oceanography, atmospheric technology, and global warming.

Scientists just receiving the Ph.D. (or equivalent) and scientists with no more than 4 years' applicable experience past the Ph.D. are eligible. *We encourage applications from women and minorities.* Successful applicants receive a stipend of \$29,800 per year (those with more than 1 year's experience receive \$31,200). Appointees are eligible for life and health insurance and travel expenses to \$800 per year. Appointments are for a period of 2 years and normally begin between June and October.

To apply, send (1) transcripts of undergraduate and graduate university courses; (2) an up-to-date curriculum vitae including honors, awards, scholarships and fellowships; (3) an abstract of doctoral thesis; (4) list of all publications; (5) summary of scientific work experience; (6) four reference letters sent directly to NCAR; and (7) a short statement of the nature of interest in the atmospheric sciences and work to be done during the visit. Deadline for receipt of all materials is 10 January 1992. Selections will be announced in late February or early March 1992.

Inquiries and applications should be addressed to: **Barbara McDonald, Coordinator, NCAR Advanced Study Program/S, P.O. Box 3000, Boulder, CO 80307-3000 (e-mail address: barbm@asp2.ucar.edu). NCAR is an Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL FELLOWSHIPS IN CELL BIOLOGY

Fellowships in cell biology are available in the Center for Light Microscope Imaging and Biotechnology, a NSF Science and Technology Center. The center supports research in cell and developmental biology and the development of new technology that extends the usefulness of light microscope imaging in biological research. Research opportunities exist in four areas: (1) Cytoplasmic structure and cell motility (D. Lansing Taylor), (2) fluorescent in situ hybridization (Alan Waggoner), (3) membrane traffic and organelle biogenesis (Robert F. Murphy), and (4) regulation of mitochondrial metabolism in intact tissue (Alan Koretsky). Candidates should send curriculum vitae, three letters of recommendation, and a statement of research interests to: **Dr. D. Lansing Taylor, Department of Biological Sciences and Center for Light Microscope Imaging and Biotechnology, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213.**

### POSTDOCTORAL FELLOW UNIVERSITY OF MICHIGAN

A position is available to study signal transduction in the retinal pigment epithelium. Projects include characterization of G protein-coupled systems and cell surface receptors. Experience in recombinant DNA or monoclonal antibody technology desired. Send curriculum vitae and the names of three references to: **Dr. Debra A. Thompson, Departments of Ophthalmology and Biological Chemistry, University of Michigan, Kellogg Eye Center, 1000 Wall Street, Ann Arbor, MI 48105.**

### FORESTRY FELLOWSHIPS

Harvard University announces Bullard Fellowships in Forest Resources with stipends available for advanced study and research in all aspects of forest biology. Fellowships are open to individuals in academic careers, public service, or private forestry with stipends up to \$25,000. Further information may be obtained from: **Committee on the Charles Bullard Fund for Forest Research, Harvard University, Harvard Forest, Petersham, MA 01366. Deadline for application: 1 February 1992.**



## UNIVERSITY OF HONG KONG

### Investigator

In the Institute of Molecular Biology  
(Ref. 91/92-36)

Applications are invited for a newly established post of Investigator in the Institute of Molecular Biology on a fixed-term contract for 3 years in the first instance, tenable from as soon as possible. Molecular biologists or cell biologists with a Ph.D. degree in an appropriate field, and postdoctoral research experience, are invited to apply. The appointee is expected to conduct research in the area of diabetes or diabetic complications.

Annual salary (non-superannuable but attracting 25% (taxable) terminal gratuity) is on a 15-point scale: HK\$225,180–516,480 (approx. US\$1=HK\$7.70 as at October 15, 1991). At current rates, salaries tax will not exceed 15% of gross income. Children's education allowances, leave, and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7.5% of salary.

Enquiries should be directed in the first instance to Dr. Stephen Chung (Principal Investigator) by Fax (852) 8551254. Further particulars and application forms may be obtained from Appointments (39985), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK; or from the Appointments Unit, Registry, University of Hong Kong, Hong Kong (Fax (852)-5592058; E-mail: APPTUNIT@HKUVM1.HKU.HK). Closes 20 December 1991.

## RESEARCH SCIENTISTS AND ASSOCIATES RECOVERY PROCESS DEVELOPMENT

**Amgen** has distinguished itself as the leader in the development of human therapeutic products through applications of biotechnology. As a result of our continuing commitment to excellence, we are actively seeking individuals to contribute to our protein refolding, purification, and scale-up efforts in process development.

Applicants for Research Scientist positions must have a Ph.D. in Biochemistry, Chemical Engineering or a related discipline with an emphasis on the purification and refolding of recombinant proteins. Previous industrial experience is desirable but not essential.

Candidates for Research Associate positions must have a Bachelor's or Master's degree in Biochemistry or a related field and a minimum of two years' experience in the purification and characterization of proteins.

**Amgen** provides a stimulating and challenging research environment in which scientists are given the resources necessary to achieve their full potential. Our salary and benefits package, including full relocation benefits, reflects this commitment. If you have the necessary skills and would like to be a part of a growing organization that places a high priority on its human resources, please send a CV or resume, in confidence, to:

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## Laboratory Director

### Retrovirology/Virology

Genetic Therapy, Inc., a leader in developing gene therapy products, has been involved in the first clinical testing of retroviral-mediated gene therapy, through its collaborators at the National Institutes of Health and at other leading research institutes. GTI is currently looking for an experienced researcher, with a Ph.D. or M.D. qualification and a minimum of 5-7 years research experience, to direct a laboratory of 6-8 researchers and technicians aimed at developing improved retroviral and other viral vectors for gene therapy. Expertise and experience in retrovirology, and in directing and supervising a major research program, is essential. A strong background in recombinant DNA techniques, animal cell culture and general virology is required.

Applicants should send their resumes, and the names and addresses of 2 references to:



Genetic Therapy, Inc.  
Human Resources - LD2  
19 Firstfield Road  
Gaithersburg, MD 20878

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## USDA—FOREST SERVICE Southern Forest Experiment Station Two Positions

### RESEARCH FORESTER/PROJECT LEADER

We are seeking a Project Leader/Supervisory Research Forester for our Growth and Yield of Natural Even-aged Loblolly and Longleaf Pines Research Unit at Mississippi State University, Mississippi. The unit's mission is to develop integrated systems for predicting the development, growth, and yield of natural even-aged stands of loblolly and longleaf pines in the South. Studies will be conducted to determine how the growth of stands may be described quantitatively and how it is affected by stand structure, treatments, and the passage of time. Research also involves use of long-term growth and yield data to investigate the effects of Global Change. We are interested in candidates with a knowledge of forest biometrics, computers, statistical analyses, and modeling, and have the ability to interpret and effectively report research results orally and in technical writing. Qualifications: Ph.D. or equivalent in Forestry or related fields. *Announcement number is SO-406-C-91D*

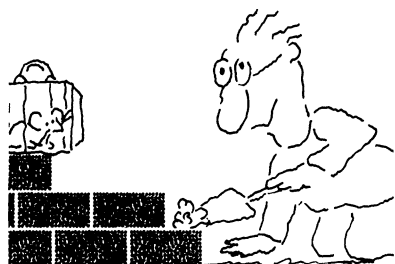
### RESEARCH FORESTER/ECOLOGIST/PROJECT LEADER

We are also seeking a Project Leader/Supervisory Research Forester or Ecologist for our Regeneration and Management of Southern Hardwoods research unit, Southern Hardwood Laboratory, Stoneville, Mississippi. The mission of the program is to 1) determine alternative silvicultural methods and guidelines necessary for regeneration and multiple-use management of southern bottomland/wetland hardwood resources, 2) increase understanding of bottomland/wetland forest ecology, and 3) expand understanding of selected wildlife species responses to varying levels of habitat disturbance or loss. We are interested in candidates with a knowledge of forestry or related plant science, computers, statistical design and analyses, and modeling, and have the ability to interpret and effectively report research results orally and in technical writing. Qualifications: Ph.D. or equivalent in Forestry, Ecology or related fields. *Announcement number is SO-018-C-92D*

Applicants must have a strong research background, and experience in program and research team management. Salary: \$44,348–68,129. Contact: Dr. Walter Hough, 504/589-3003. Application materials sent on request. **APPLICATIONS POSTMARK DEADLINES: 23 December 1991.**

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## POSITIONS OPEN

**GLOBAL CHANGE POSTDOCTORAL FELLOWSHIPS** are available from the Department of Energy for research related to the U.S. Global Change Research Program. The fellowships address the nation's global change activities carried out by DOE and the Committee on Earth and Environmental Sciences. Stipend is \$35,000. Fellowships are tenable at approved federal and university laboratories including those of DOE, NASA, EPA, and others agencies in CEES. A doctoral degree received after 1 May 1989 is required as is *U.S. citizenship or PRA status*. Deadline is 15 February 1992. Contact: **Global Change Postdoctoral Fellowships, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117; telephone: 615-576-4805.**

### ROCKEFELLER FOUNDATION ENVIRONMENTAL RESEARCH FELLOWSHIPS IN INTERNATIONAL AGRICULTURE

These research fellowships provide an opportunity for established environmental scientists to join multidisciplinary research teams at international agricultural research centers such as IIRI, CIMMYT, CIAT, IITA, ICRISAT, CIP and AVRDC. The objective is to encourage creative and imaginative research aimed at integrating environmental and natural resource protection with mainline international agricultural research and development. The fellowships provide 1 to 2 years' residency at the host center plus research support with funding shared between the Foundation and the center.

Natural scientists and engineers from all parts of the globe having expertise and an established record of research productivity are encouraged to apply. Applicants must qualify for an appointment of visiting scientist at the host center, and a written project proposal needs to be developed and submitted jointly with the center.

For a full description of the program and application requirements, write to:

**Environmental Research Fellowships in  
International Agriculture  
Agricultural Sciences Division  
The Rockefeller Foundation  
1133 Avenue of the Americas  
New York, NY 10036**

*The Rockefeller Foundation places strong emphasis on Affirmative Action principles.*

**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE.** Emory University. A position is open to participate in ongoing studies of molecular regulation of insulin-like growth factors and their binding proteins. Applicants should have experience with cell culture, subcloning, transient transfection, DNase I footprinting, and other molecular biology techniques. Please send curriculum vitae and names and addresses of three references to: **Lawrence S. Phillips, M.D., Director, Division of Endocrinology and Metabolism, Emory University School of Medicine, 69 Butler Street S.E., Atlanta, GA 30303. An Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH INVESTIGATOR/FELLOW.** Electrophysiology/Molecular Biology of Ion Channels. NIH position to study expression of cardiac ion channels in *Xenopus* oocytes. Experience using electrophysiological and/or molecular biological techniques desirable. Salary negotiable. Send curriculum vitae and the names of three references to: **Dr. J. R. Hume or Dr. B. Horowitz, Department of Physiology/352, University of Nevada School of Medicine, Reno, NV 89557-0046. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** Available immediately to study the regulation of antigen processing for T cell activation and the mechanisms by which marijuana interferes with immune responses. Funding is available for a 2- to 3-year appointment. Experience in cell biology, biochemistry, and/or molecular biology is desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Kathleen McCoy, Department of Microbiology and Immunology, MCV Station Box 678, Virginia Commonwealth University, Richmond, VA 23298-0678. FAX: 804-786-9946. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply. Individuals with experience in a culturally diverse environment are highly preferred.**

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS

The Feinberg Graduate School of the Weizmann Institute of Science is now offering postdoctoral fellowships in the following fields of study:

**BIOLOGY  
CHEMISTRY  
BIOCHEMISTRY-BIOPHYSICS  
PHYSICS  
MATHEMATICS  
SCIENCE TEACHING**

These fellowships are intended for young scientists who have recently received a Ph.D. degree.

The fellowship provides a 12-month stipend (with COL adjustments), a relocation allowance and airfare to Israel. If the fellowship is renewed for a second year, return airfare is provided.

Application forms and additional information may be obtained from:

**The Feinberg Graduate School  
The Weizmann Institute of Science  
Rehovot, 76100 Israel**

Applications are reviewed twice each year: 1 January and 15 May.

### POSTDOCTORAL RESEARCH ASSOCIATE.

Outstanding opportunity for a person trained in cell and molecular biology to examine the role of the newly described cell adhesion molecule, PECAM-1 (CD31) [Science 247, 1157, (1990); J. Cell. Biol. 114, 1059 (1991)], in human platelet and leukocyte function. These cell biological studies will be conducted in the laboratory of Dr. Peter Newman at the newly constructed 50,000-square-foot Blood Research Institute. For further information, please send a letter detailing your specific training and research interests to: **Peter J. Newman, Ph.D., Blood Research Institute, The Blood Center of Southeastern Wisconsin, 1701 West Wisconsin Avenue, Milwaukee, WI 53233. An Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL RESEARCH ASSOCIATE MOLECULAR VIROLOGY

NIH-funded position available to study molecular pathogenesis of animal lentiviruses including bovine immunodeficiency virus and equine infectious anemia virus. Experience in recombinant DNA technology required. Send curriculum vitae and names of three references to: **Dr. Susan Carpenter, Department of Microbiology, Immunology and Preventive Medicine, College of Veterinary Medicine, Iowa State University, Ames, IA 50011. Equal Opportunity Employer.**

### RESEARCH ASSOCIATE/POSTDOCTORAL.

Position in cerebral blood flow regulation and cerebral ischemia research, including therapy evaluation and autonomic function in cerebral ischemia available immediately. Nationally funded projects with competitive salary. Research will involve either (1) studying normal cerebral blood flow regulation and its application to cerebral ischemia, (2) potential therapies and diagnostic methods for very early focal cerebral ischemia, and (3) autonomic and endocrine dysfunction during cerebral ischemia. Techniques for cerebral blood flow include quantitative autoradiography, laser Doppler flowmetry or microthermal conductivity. A knowledge of animal physiology and surgery preferred. Send curriculum vitae, a summary of research interests and three references to: **Dr. S. C. Jones, Cerebrovascular Research Laboratory, NC3-104, The Cleveland Clinic Foundation, One Clinic Center, 9500 Euclid Avenue, Cleveland, OH 44195-5286. Smoke-free environment. An Equal Opportunity Employer, M/F/H/V.**

**POSTDOCTORAL RESEARCH ASSOCIATE** position available immediately to examine aspartokinase-homoserine dehydrogenase gene regulation and expression in soybean and to construct and analyze transgenic plants at the USDA, Agricultural Research Service (ARS), Plant Molecular Biology Laboratory, Beltsville, Maryland. Preference to candidates with experience in plant molecular biology, biochemistry and with plant transformation techniques, Ph.D. required. Salary commensurate with experience (\$31,116 to \$37,294 per year). Send curriculum vitae and telephone numbers of three references to: **Dr. Benjamin F. Matthews, USDA, ARS, Plant Molecular Biology Laboratory, Building 006, Room 118, 10300 Baltimore Avenue, Beltsville, MD 20705-2350. ARS is an Equal Opportunity Employer.**

## Protein Biochemist

Merck Sharp & Dohme Research Laboratories is currently offering an excellent career opportunity for a protein biochemist to join the Department of Cellular and Molecular Biology. The selected individual will provide technical support involving purification and characterization of recombinant proteins of potential pharmaceutical interest. Major responsibilities include routine implementation of assays such as ELISA, radio-immunoassays, radio-receptor assays, SDS-PAGE and immunoblotting; operation and maintenance of HPLC and FPLC systems; data analysis on PC-based softwares.

Requirements include a BS/MS in Chemistry or the biological sciences with a general background in biochemistry and at least two years of relevant experience. Ability to analyze data, troubleshoot instrumentation and a familiarity with computers is necessary. Excellent oral and written communication skills and organizational skills are required.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and research environment are excellent. For immediate consideration, please send your resume to **S.R. Jenkins, Ad #101, MERCK & CO., INC., P.O. Box 200, Rahway, NJ 07065.**

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## Staff

### TRANSGENIC TECHNOLOGIST

The Ohio State Biotechnology Program is seeking a qualified individual to manage the transgenic animal facility and to provide technical guidance to researchers throughout the campus in generating transgenic animals. Candidates should have an M.S. or Ph.D. and a minimum of two years of experience in the field. Send curriculum vitae and three letters of reference to: **Dr. Jeffrey N. Masters, Chairperson, Transgenic Technologist Search Committee, Ohio State Biotechnology Center, 206 Rightmire Hall, 1060 Carmack Rd., Columbus, OH 43210-1002.** Screening of candidates will begin January 15, 1992.

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**University of Otago**  
New Zealand

### LECTURER IN PHYSIOLOGY

Applications are invited from suitably qualified physiologists for a full-time lectureship which will become vacant from 1 February 1992.

The applicant will be expected to initiate or participate in an active programme of research. The present research interests of the Department are in the fields of neurophysiology, cardio-respiratory physiology and epithelial transport. However, candidates with experience in any area of physiology will be considered.

The Department teaches physiology to students in the Health Sciences (Medicine, Dentistry, Pharmacy, Physiotherapy) as well as to Science students.

Commencing salary will be dependent on qualifications and experience, and will be made within the following salary range:

Lecturer: \$NZ37,440 to \$NZ49,088, with a bar at \$NZ45,448 per annum.

Lecturer (Medically qualified): \$NZ41,600 - \$NZ49,400 per annum.

Further particulars are available from the Secretary-General, Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, England, or the Registrar, University of Otago, P.O. Box 56, Dunedin, New Zealand, (Facsimile 64 3 4741 607).

Applications quoting A91/42 close with the Registrar and London on 12 December 1991.

*Equal opportunity in employment is University policy.*

## Scientist/Postdoctoral Fellow. Molecular Genetics Of Genitourinary Malignancy.

The Urologic Oncology Section of the Surgery Branch of the National Cancer Institute has an opening for a scientist/postdoctoral fellow to join its studies of the molecular genetics of tumor suppressor genes in genitourinary malignancy. Positions involve molecular and cellular studies performed to identify and clone the disease gene associated with sporadic and familial kidney cancer and to characterize the molecular genetic abnormalities associated with prostate carcinoma. Prior experience in molecular biology is preferable. Interested candidates should send a Curriculum Vitae and two letters of reference to W. Marston Linehan, MD, Head, Urologic Oncology Section, NCI.



**National Cancer Institute**  
**Surgery Branch**

National Institutes of Health, Building 10, Room 2B47,  
9000 Rockville Pike, Bethesda, Maryland 20892  
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## CHEMISTS-ENGINEERS- PHYSICISTS-MATHEMATICIANS OPERATIONS RESEARCH ANALYSTS INTERNATIONAL RELATIONS SPECIALISTS STATISTICIANS-ECONOMISTS- GEOPHYSICISTS

Under its William C. Foster Fellows Visiting Scholars program, named in honor of its first Director, the U.S. Arms Control and Disarmament Agency offers an opportunity for scholars in these and other disciplines to apply their expertise to reduction and control of armaments to increase world security. During the 1992-93 academic year scholars might participate in such ACDA activities as devising treaty provisions that permit adequate verification, evaluating data relating to compliance with treaties in force, performing arms control research, estimating the effect of treaty proposals on the strategic and conventional military balance, supporting inter-agency development of arms control policy, exploring possibilities for reducing nuclear weapon proliferation and third world instability, taking part in international negotiations on arms control, and implementing ratified arms control treaties.

Visiting scholars must be citizens of the United States and on the faculty of a recognized institution of higher learning. For information call (202) 647-4695 or write to: Foster Fellows Visiting Scholars Program, Operations Analysis, Room 5726, U.S. Arms Control and Disarmament Agency, 320 21st Street, NW, Washington, DC 20451. *Application deadline is January 31, 1992.*

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FELLOWS VISITING SCHOLARS PROGRAM  
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# Safety Assessment Specialist

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has an immediate opening in its Pathology and Experimental Toxicology Department for an experienced toxicologist to participate in the compilation of documents associated with departmental projects. The summarization of study results and assessment of safety of candidate drugs are the major responsibilities of this position. Collation and summarization of published data pertinent to subject compounds and therapeutic categories is also required. This position will participate in departmental associated research which includes serving as a study director for in-house studies and as a study monitor for contract studies. Further, the individual will participate on interdepartmental drug discovery and development teams.

Requirements for this position include a Ph.D. in toxicology or related discipline and several years of experience; effective communication skills; a background in toxicology research; knowledge of GLP requirements; and effective information gathering skills.

This position is located at our research facilities in Ann Arbor, Michigan, adjacent to the University of Michigan campus. The successful candidate can expect an excellent salary and benefits, professional development, and an excellent living and working environment. Qualified candidates should respond with curriculum vitae, salary requirements and references to **Human Resources Department, Box JDM 90444, PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, MI 48105. All responses are confidential. "Smoke-Free Work Environment"**

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### FACULTY POSITIONS IN MOLECULAR BIOLOGY CASE WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

Four full-time tenure track faculty positions are available in the **Department of Molecular Biology and Microbiology**. It is anticipated that appointments will be made at the Assistant Professor Level; however, exceptionally qualified senior investigators are encouraged to apply.

Two positions will be filled by applicants working in broadly defined areas of eukaryotic and prokaryotic molecular biology. In prokaryotes, we are particularly interested in individuals working in the areas of transcriptional regulation, molecular mechanisms of pathogenesis, and molecular control of transport. In eukaryotes, our interests include but are not exclusive to individuals studying the transcription apparatus, signal transduction and yeast molecular biology.

Two additional appointments will be made in the newly established **Center for Molecular Parasitology**. These positions are restricted to individuals who are asking basic mechanistic questions regarding transcriptional and post-transcriptional (RNA processing) gene regulation in lower eukaryotic organisms. Such organisms include the parasitic protozoa and helminths as well as free living organisms (both protozoa and helminths) which provide models for the study of gene expression in parasites.

All four positions will be highly competitive with regard to start-up funds, laboratory space and salary. Applicants for all positions (specify the area in which you wish to be considered) should send curriculum vitae, statement of research interest and the names of four references by 1 February 1991 to:

Search Committee Chairman  
Department of Molecular Biology and Microbiology  
Case Western Reserve University  
10900 Euclid Ave.  
Cleveland, OH 44106-4960

An Affirmative Action, Equal Opportunity Employer.

### POSTDOCTORAL SCIENTIST

## MOLECULAR GENETICS

SmithKline Beecham, a world leader in pharmaceutical research, has an opportunity in our expanding Biopharmaceutical Research & Development organization. As a member of a research group focusing on the molecular genetics of hematopoiesis, this individual will study the response of hematopoietic stem cells to novel agents.

Requirements include a PhD in Molecular Biology or other biological science, and a strong background in recombinant DNA techniques. Experience in cDNA cloning, subtractive hybridization, RNA analysis as well as protein 2-D gel analysis is preferred.

Our state-of-the-art research facilities are located in suburban Philadelphia, near Valley Forge, PA. SmithKline Beecham Pharmaceuticals provides a stimulating and challenging work environment based on creativity, commitment and teamwork. We offer a competitive compensation/benefit/relocation package. For confidential consideration, please send your C.V. to: Nancy Hasson, Employment Administrator, #H0191, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

**SB**  
**SmithKline Beecham**  
Pharmaceuticals

### POST-DOCTORAL POSITION

## National Institute of Diabetes and Digestive and Kidney Diseases Phoenix, Arizona

A post-doctoral fellowship is available for a recent Ph.D. in biochemistry or related discipline to participate in studies of the mechanism of insulin resistance in man. Results of studies conducted in our laboratory suggest that abnormal regulation of skeletal muscle protein phosphatase (PPI) activity by insulin may be a primary defect responsible for insulin resistance and subsequent development of non-insulin dependent diabetes mellitus in humans. Current projects include studies of mechanisms of insulin regulation of PPI activity and gene expression.

This position is funded through the NIH Intramural Research Training Award Program and has a starting annual stipend of \$25,000 - \$28,000, depending on length of previous post-doctoral experience.

Send curriculum vitae and letter of application to:

**David Mott, Ph.D.**  
**Clinical Diabetes and**  
**Nutrition Section**  
**National Institutes of Health**  
**4212 North 16th Street**  
**Room 541**  
**Phoenix, Arizona 85016**



NIH is an Equal Opportunity Employer



## Post-DOCTORAL SCIENTIST

Hybritech Incorporated, a \$100 million subsidiary of Fortune 100 Eli Lilly and Company and a recognized leader in the manufacturing and marketing of *in vitro* diagnostic tests utilizing monoclonal antibody technology, has an opportunity for a Post-Doctoral Scientist in our San Diego research facility.

### Multiple Drug Resistance

This industrial post-doctoral position will focus on the study of the mechanisms of Multiple Drug Resistance utilizing monoclonal antibodies which recognize P-glycoprotein. The research will also focus on the development of imaginative approaches to diagnosis and treatment of drug resistant neoplasia. The ideal candidate for this position will have a PhD with knowledge and experience in the field of drug resistance.

Hybritech's investment in facilities, R&D and human resources reflects our commitment to remain in the forefront of monoclonal antibody technology and related fields. Our salaries and benefits also reflect that commitment. Please direct your resume to:  
HYBRITECH INCORPORATED, Human Resources  
SM/S/11-29-91, P.O. Box 269006, San Diego, CA  
92196-9006. We are committed to diversity in our workforce/EOE.

**TEAM**  **Hybritech**  
INCORPORATED

Applied Biosystems, a leading supplier of automated instrument/reagent systems for biotechnology research, is currently expanding the Diagnostics R&D group. As part of our commitment to the future, we have openings for individuals who wish to participate in bringing tomorrow's technology into the clinical arena.

### Molecular Biologist/ DNA Biochemist

#### *San Francisco Bay Area*

We are seeking professionals to be part of a multi-disciplinary team working to create a line of DNA diagnostic products. You will help develop our proprietary DNA detection (oligonucleotide ligation) technology into clinical diagnostic assays.

Successful candidates should have a doctorate in a life science discipline and a strong background in molecular genetics. These positions require at least 4 years of experience with nucleic acid hybridization, amplification and detection. Experience with either cell culture, microbiology, or diagnostics assay development is highly desirable. We are seeking people with a creative flair to be strong individual contributors to a group effort.

We offer a competitive salary and benefits package. Please forward your resume to Applied Biosystems, Inc., Human Resources - Reference #0492, 850 Lincoln Centre Drive, Foster City, CA 94404. Applied Biosystems is an equal opportunity employer.

 **Applied  
Biosystems**

## RESEARCH ASSOCIATES

**Amgen** is a dynamic and growing organization that is a recognized leader in recombinant DNA technology. Our leadership in developing erythropoietin and other products for human therapeutics and human diagnostics through applied biotechnology has placed us firmly in the forefront of the industry. We are currently recruiting for two Research Associate positions.

Both positions require a BS degree in Biology or a related science.

The primary responsibility of the first position will be the maintenance of various mammalian cell lines and related growth and production experiments on these cells. The use of large scale cell culture techniques will be required. One to two years' experience in tissue culture and a basic understanding of Molecular Biology are preferred. Other responsibilities will include the ordering of supplies and the maintaining of a legible and detailed laboratory notebook.

The second Research Associate position requires experience with dideoxy sequencing, basic cloning techniques and computer analysis of DNA sequencing. Experience with ABI 373 automatic sequencer is preferred.

Both positions require the willingness and ability to carry out detailed instructions and work well within a team structure, including overtime and weekends as needed.

**Amgen** offers a stimulating and challenging environment on the leading edge of biotechnology as well as an excellent compensation and benefits package. If you have the necessary skills and would like to be a part of a company that places a high priority on its human resources, please send a resume, in confidence, to:

**AMGEN, INC.**  
**Recruitment, Dept. #4414**  
**Amgen Center**  
**Thousand Oaks**  
**CA 91320-1789**

Equal  
Opportunity  
Employer

**AMGEN**

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE** position available immediately. Candidate should have a Ph.D. degree and experience in neuroendocrine control of pituitary function. Training in molecular biology and immunology techniques for the study of brain peptide hormones is essential. Submit curriculum vitae and the names of three references to: **Satya P. Kalra, Ph.D., Professor, Department of Obstetrics and Gynecology, University of Florida College of Medicine, Box 100294 JHMC, Gainesville, FL 32610. An Equal Opportunity/Affirmative Action Employer.**

### RESEARCH ASSOCIATE

Position is available immediately for M.D. or Ph.D. to participate in conducting a study on mechanisms of testicular immune privilege with particular interest in the role of proteins secreted by the Sertoli cells. Three years of experience in job offered or 2 years of experience in biology, immunology, and transplantation. Research will include isolation and culture of Sertoli cells, T lymphocyte immunoreaction assay, purification and proteins secreted by Sertoli cells, molecular cloning of cDNA, animal surgery and handling. Experience in computer data collection and statistical analysis are also required. Salary: \$30,000 per annum. *The Employer is an Equal Employment, Affirmative Action, Section 504, Title IX Employer.* Send résumé to:

**Mr. Mike Daniel**

**Job Service Program and Technical Support  
Tennessee Department of Employment Security  
Nashville, TN 37245-1200  
Job Order #TN 1235910**

A **RESEARCH ASSOCIATE** position is available in Department of Psychiatry at teaching hospital affiliated with leading medical school to conduct cognitive neuroscience research on normal aging and age-related neurological diseases. Duties include: coordination of hospital participation in a multi-center research study of Alzheimer's disease, and the carrying out of home neurologic and neuropsychologic assessment of patients throughout hospital catchment area; design of screening procedures and testing protocols for independent research for studies in subject populations; develop and carry out strategies for statistical analysis; preparing manuscripts on research results for publication in scientific journals; develop new methods for neuropsychological testing; administer neuropsychological test battery to nursing home residents; counsel family members of patients; supervise research assistants.

Applicant must have a Ph.D. degree in psychology, with specialization in neuropsychology, from an APA-accredited clinical and experimental psychology program, and a minimum of 2 years of pre- or postdoctoral experience with normal elderly subjects and elderly patient populations with age-related neurological diseases including counseling in a clinical setting. Must have proven ability to carry out independent research as evidenced by publications in recognized scientific journals. Familiarity with administration of neurological examinations is required. Prior experience working in both hospital and long-term care facilities required. Salary: \$37,000 per annum.

Interested applicants should submit two copies of résumés to: **P.O. Box 8968, Boston, MA 02114** and refer to **Job Order #2080**.

**SENIOR RESEARCH ASSOCIATE** to conduct both independent medical research and to participate in collaborative clinical studies in transplantation immunology. Job involves establishment of animal models of acute graft-versus-host disease; histological and immunohistological analysis of animal tissues; cytokine and cytotoxicity assays with immunological and biological methods; development of monoclonal antibodies; definition and molecular characterization of structures/molecules involved. Must have M.D. or equivalent with 1 year of postdoctoral experience in molecular biology and 2 years of research experience in bone marrow transplantation. Forty hours per week; \$25,045 per year. Send résumé to the attention of **Tillie Moore, Job Order #824697, Kentucky Job Service, 300 South Upper Street, Lexington, KY 40508**.

**PERSONNEL PLACEMENT ADS** in our line classified columns can be boxed for higher visibility. Call **SCIENCE** at 202-326-6555 for details.

## POSITIONS OPEN

**RESEARCH ASSOCIATE.** To carry out research on influenza virus using molecular biology and genetic studies. Develop better vaccines against influenza and investigate epidemiology of influenza B. Assist in training graduate students in technical areas as well as experimental design. Write up results of research for publications and present results at national/international meetings. Ph.D. in microbiology to include graduate level courses in molecular biology and biochemistry with knowledge and practical application of recombinant DNA technology, making mutants, expression of mutated genes, tissue-culture techniques, and writing manuscripts for publication. Forty hours per week, 9:00 a.m. to 5:00 p.m. Salary: \$29,000 per calendar year. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222. Re: Job Order #AL0626360.**

**ECOLOGIST.** Ramon Science Center, Israel, seeks an ecologist with a Ph.D. experienced in population, community or ecosystem ecology, and with interest in conservation biology. Nontenured position suitable for postdoctorates and those interested in 1 to 5 years of research on conservation and management of a desert national park. Applications will be considered as they are received until the position is filled. Send curriculum vitae, reprints, outline of research interests, and arrange for three letters of reference sent to: **Professor U. Safriel, Mitrani Center for Desert Ecology, Institute for Desert Research, Sede Boqer Campus, 84993 Israel.**

**ENVIRONMENTAL SCIENTIST.** Barnard College Department of Environmental Science seeks applicants with teaching and research interests in earth sciences, chemistry or biology to lead the department. Rank open. Successful applicant expected to develop a research program at Barnard in association with cognate departments, with Columbia's Lamont-Dougherty Geological Observatory, or with other nearby institutions. Send curriculum vitae, statement of teaching and research interests, and three letters of recommendation by 15 January 1992 to: **Dean Robert McCaughey, Barnard College, Columbia University, 3009 Broadway, New York, NY 10027-6598. Affirmative Action/Equal Opportunity Employer.**

### MOLECULAR BIOLOGIST

Franciscan Shared Laboratory, Inc., an independent clinical laboratory serving the Greater Milwaukee area, has an immediate opening for a highly motivated molecular biologist. This is a unique opportunity for a Ph.D. with 2 years of postdoctoral experience in molecular biology with emphasis relating to diagnosis of disease in a clinical setting. The selected candidate will be expected to oversee the Molecular Diagnostic Division of our laboratory and to develop tests to analyze oncogene expression as well as microbiology and virology identification. Excellent oral and written communication skills required. Qualified applicants are invited to submit curriculum vitae, reference list, and salary requirements in confidence to:

**Robert A. Braun  
Personnel Manager  
Franciscan Shared Laboratory, Inc.  
11020 West Plank Court, Suite 100  
Wauwatosa, WI 53226**

**HUMAN MOLECULAR GENETICIST.** Marshfield Clinic is accepting applications for the position of **SENIOR RESEARCH SCIENTIST** as an expansion of the human genetics research program currently centered in the laboratory of Dr. James Weber. We are seeking an exceptional individual who will develop an outstanding, independent research program. The specific research area is open, although candidates with interests in the areas of cancer or cardiovascular diseases are especially encouraged to apply. Candidates must possess a Ph.D. or M.D. degree and at least 2 years of postdoctoral experience. Marshfield offers a newly constructed, equipped laboratory, generous start-up funds, and a competitive salary and benefits package. Evaluation of applications will begin 15 December 1991 and will continue until the position is filled. For consideration, send curriculum vitae, a brief statement of research interests and the names of three references to: **Search Committee, 1129SCM, Marshfield Clinic, Human Resources Department, 1000 North Oak Avenue, Marshfield, WI 54449. Equal Opportunity Employer, M/F/H/V.**

## POSITIONS OPEN

### AQUATIC ECOLOGIST

A new tenure-track position is available at the University of Oklahoma (OU) Biological Station, with academic appointment in the Departments of Zoology or Botany/Microbiology. The position is 70% research, 20% teaching and 10% service. The successful candidate will establish an extramurally funded research program in residence at the Biological Station, located at Lake Texoma. Teaching is a minimum of one course per year, either at the Biological Station or on the main campus. A completed Ph.D. is required. Postdoctoral research experience, strong quantitative and computer skills, quality publications, and demonstrated research funding are desirable. Preference will be given to an individual whose empirical research addresses recent ecological theory as it applies to lentic or lotic systems, and complements that of the resident faculty (Golladay, Gophen, Hax, Hill, and Matthews).

Applications must include complete curriculum vitae, reprints, a description of research interests, and four letters of recommendation. Pending budgetary approval, screening of applicants will begin 15 January 1992 and continue until the position is filled.

*Women and minority candidates are encouraged to apply.* Applications or requests for additional information should be sent to: **Dr. William J. Matthews, Chair of Search Committee, Biological Station, HC 71 Box 205, Kingston, OK 73439. Telephone: 405-564-2463; FAX: 405-564-2479.**

*The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. OU has a policy of being responsive to the needs of dual career couples.*

### EVOLUTIONARY PLANT BIOLOGIST

The University of California, Berkeley, seeks a distinguished evolutionary plant biologist to assume a tenured professorial appointment in the Department of Integrative Biology (level commensurate with experience), and directorship of the state-funded University Herbarium and the privately endowed Jepson Herbarium. The department and herbaria seek candidates whose training includes taxonomic and systematic methods and whose research interests and/or abilities include current molecular evolutionary approaches. The successful candidate will be expected to contribute to the development of evolutionary plant biology on the campus, provide leadership in the herbaria, direct the growth and maintenance of the collections, and develop an active program of research and instruction that will attract students to the department.

Applications should include curriculum vitae, names and addresses of three references, a summary of current research, descriptions of past research including reprints, and evidence of teaching and administrative experience. The deadline for receiving applications is 15 January 1992. The anticipated earliest start date is 1 July 1992. Send applications to: **Jere H. Lipps, Chair, Department of Integrative Biology, 345 Mulford Hall, University of California, Berkeley, CA 94720. The University of California is an Equal Opportunity/Affirmative Action Employer.**

### NEUROBIOLOGIST

The Department of Biological Sciences at the University of Wisconsin-Milwaukee (UWM) anticipates a tenure-track position in neurobiology. We seek an individual with expertise in cellular or molecular aspects of the nervous system, with research interests complementing those of existing faculty in neuroendocrinology, development neurobiology, or behavioral neuroscience. In addition to establishing an active extramurally funded research program, the successful candidate would be expected to contribute to departmental teaching, including a course in neurobiology.

Applicants should provide curriculum vitae, a concise statement of research and teaching goals, and have three letters of reference sent to:

**Chair, Neurobiologist Search Committee  
Department of Biological Sciences  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, WI 53201**

The closing date for receipt of applications is 1 February 1992.

*The University of Wisconsin-Milwaukee is an Equal Opportunity, Affirmative Action Employer. UWM is required to release a list of the names of nominees and applicants upon request.*

**E. CLAIBORNE ROBINS DISTINGUISHED UNIVERSITY  
PROFESSORSHIP IN THE SCIENCES  
UNIVERSITY OF RICHMOND**

The University of Richmond announces the establishment of the E. Claiborne Robins Distinguished University Professorship in the Sciences, and seeks senior candidates for appointments from one semester to five years in duration. The purpose of this chair is to enhance interest in and understanding of science, scientific research, and science education among the university community, and especially among its undergraduate population. Appointments to the chair will be made on the basis of (1) eminence in science (including mathematics and computer science), in science studies (including the history, philosophy and sociology of science), or science education; (2) preparation for and commitment to teaching undergraduates; and (3) expressed desire to offer, among other things, courses, seminars, or public lectures that will reach across disciplinary lines and appeal to science majors and non-majors alike.

Nominations as well as applications are invited. Applicants should send a statement of interest, curriculum vitae, selected writings, and the names and addresses of at least three references to

**David E. Leary**  
Dean of Arts and Sciences  
University of Richmond  
Richmond, VA 23173

Review of applications will begin soon after receipt. The University of Richmond is an equal opportunity and affirmative action employer, and it encourages women and minorities to apply for its positions.

**MOLECULAR GENETICIST**

**POST-DOCTORAL POSITION**

**National Institute of Diabetes and Digestive  
and Kidney Diseases  
Phoenix, Arizona**

Full-time post-doctoral research position for an M.D. or Ph.D. (preferably with some years of relevant experience) at the Clinical Diabetes and Nutrition Section. The project involves genetic analyses of obesity related phenotypes in the Pima Indian population.

The candidate is expected to work independently, as well as in close collaboration with other investigators studying the genetics of non-insulin dependent diabetes.

Send curriculum vitae, three letters of reference, and a summary of current research activity to:

**Eric Ravussin, Ph.D.**  
Clinical Diabetes and  
Nutrition Section  
National Institutes of Health  
4212 North 16th Street, Room 541  
Phoenix, Arizona 85016



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**CAREER OPPORTUNITIES  
IN OLIGONUCLEOTIDE  
THERAPEUTICS**

ISIS Pharmaceuticals, located in Carlsbad, CA (San Diego County), is a pharmaceutical company focused on antisense oligonucleotide therapeutics. ISIS has innovative research programs, strong funding, a world-class scientific advisory board, excellent facilities and strong academic ties which make ISIS an exciting opportunity for outstanding individuals. Present openings include:

**Ph.D.'s RNA Biochemistry**

We are seeking Ph.D. scientists to develop and implement research programs in RNA structure, processing, translation, and the identification of novel therapeutic targets for antisense oligonucleotides within these processes. We provide a unique opportunity to study RNA processing with strong chemical support providing novel oligonucleotide analogs designed to target specific gene expression. This program is part of a long-term commitment to high quality and high-visibility research in RNA processing and metabolism. **Position code 103.**

**Ph.D. Phospholipid  
Biochemist/Biophysicist**

We are seeking a Ph.D. scientist to develop and implement a research program in the interaction of oligonucleotides and novel oligonucleotide analogs with biological membranes and artificial membrane model systems. The successful candidate would work closely with medicinal chemists and cellular biologists to study the mechanisms by which oligonucleotides and their analogs interact with biological membranes and aid in the design of novel oligonucleotides. At least 2 years' postdoctoral experience in lipid biochemistry and/or biophysical techniques required. Experience in membrane transport processes or cell biology of membrane topology desired. **Position code 104.**

**Ph.D.'s Combinatorial  
(Random-mer) Strategies**

We are recruiting Ph.D.'s at several levels to build our program in combinatorial approaches to novel oligonucleotide ligand-receptor recognition. This program currently is based upon three distinct ISIS proprietary methodologies which use RNA, DNA and a library of novel analogs to design unique oligonucleotide based ligands. These positions require innovative scientists trained in the chemistry and biochemistry of nucleic acids and molecular recognition. **Position code 105.**

**Postdoctoral Scientists,  
Oligonucleotide Molecular  
Pharmacology, RNA Biochemistry,  
NMR**

Postdoctoral positions are available to do innovative research on the molecular pharmacology of oligonucleotides (**position 106**), RNA Biochemistry, Structure or Metabolism (**position 107**), or Nucleic Acid Structural Studies by NMR (**position 108**).

ISIS Pharmaceuticals offers a competitive salary, benefits, and substantial equity participation. Our new facility is located in San Diego County near the University of California, San Diego, and other major scientific centers. Please submit a cover letter, which clearly specifies position code, cv, reprints of relevant publications, and names and telephone numbers of references to: **Ms. Linda Kopps, ISIS Pharmaceuticals, 2280 Faraday Avenue, Carlsbad, CA 92008.** An Equal Opportunity Employer.

**ISIS PHARMACEUTICALS**

## POSITIONS OPEN

**ENTOMOLOGIST.** Identification of insect pests, diseases, natural enemies on agricultural crops (almonds, walnuts and apples); monitor pest enemies population dynamics/interactions; determine if economic injury level is reached and whether or not control measures are required. University level training, research background or experience in the following: biological control, population ecology, plant pathology, pest management, statistics and word processing including graphics. University training/research/experience may be part of required 6 months of experience. Ph.D./equivalent/entomology and 6 months of experience in job or as agricultural scientist. Salary: \$2666 per month. Job site/interview: Fresno, California. Send ad with résumé to: **Job #JW24082, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 13 December 1991.

**FERMENTATION MICROBIOLOGIST.** Sandoz Research is committed to agri-research. Our innovative bio-rational approach offers a challenging work environment. Our Biologicals Department is seeking an intermediate level scientist with an M.S. in microbiology/bacteriology or B.S. with several years of relevant experience. Responsibilities include fermentation development experimentation at the shake flask, jar fermenter, and pilot fermenter level; overseeing a jar fermenter facility; and performing experiments associated with strain improvement and selection. Send résumé to: **HR Department, 975 California Avenue, Palo Alto, CA 94301-1104. Affirmative Action/Equal Opportunity Employer.**

### CHILDREN'S HOSPITAL DANA-FARBER CANCER INSTITUTE DIVISION OF EMERGENCY MEDICINE AND INFECTIOUS DISEASE

Ph.D. level scientist to perform research on the pathogenesis of endotoxin shock. Experience in protein and polysaccharide chemistry is required and experience in molecular biology desirable. Candidate will be expected to work independently and generate grant support in 2 to 3 years. Respond with curriculum vitae to: **Gary Fleisher, M.D., Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.** To assure full consideration, curriculum vitae must be received prior to 1 February 1992. *Women and minorities are encouraged to apply.*

**RESEARCH PHARMACIST.** Provide technical and project leadership in all phases of research and development of drug delivery systems and diagnostic products, including design, development, scale-up and testing oral, parenteral and inhalation products. Responsible for projects in the development of biodegradable polymeric microspheres, specifically magnetic microspheres, for parenteral drug delivery. Responsible for utilizing research instrumentation such as high-performance liquid chromatography, particle-size analyzers, atomic absorption spectrophotometer and electron microscopes. Also assist in toxicology, pharmacokinetic modeling and handling of tumor-bearing animals. Ph.D. in pharmacology required together with 2 years, 6 months experience as a research pharmacist or 2 years, 6 months experience as a postdoctoral research fellow or postdoctoral lecturer. Experience must have included the development and testing of magnetic microspheres for parenteral drug delivery and drug targeting together with the application of micro-encapsulation for improving drug delivery via aerosols and the microencapsulation for parenteral delivery of erythromycin. Forty hours, 8:00 a.m. to 5:00 p.m.; \$41,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumés to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605. Attention: M. Zielinski, Reference #V-IL-3212-Z.** No calls. *An Employer-Paid Ad.*

**RESEARCH SCIENTIST** needed by biotechnology research and development firm to conduct scientific research directed at identification of endothelial plasminogen receptors by expression cloning. Minimum requirements: Ph.D. in biochemistry or molecular biology and 2 years of experience in the job offered or 2 years of postdoctoral experience in recombinant DNA technology. Publications in recognized international journals in the area of cDNA cloning/gene regulation. Salary: \$36,375 per year; 40 hours per week in Seattle, Washington. Send résumé by 6 January 1992 to: **Employment Security Department, ES Division, Job #289927, Olympia, WA 98504. Equal Opportunity Employer.**

## POSITIONS OPEN

**RESEARCH AGRONOMIST** to develop and identify millet inbred lines and hybrids, including maintenance of germ plasma; plan and supervise laboratory and field operations such as seed filing, inventory, seed packaging, planting, pollinating, harvesting and data collection; prepare reports and data summaries; supervise selection and training of temporary employees. M.S. agronomy (plant breeding) plus 5 years of experience as a plant breeder (qualifying experience may have been obtained before or after masters), and coursework or on-the-job experience in millet breeding. Salary: \$2098 per month; 40 hours per week. Apply at the **Texas Employment Commission, Plainview, Texas**, or send résumé to the **Texas Employment Commission, TEC Building, Austin, TX 78778, J.O. #6422053. Ad paid by an Equal Opportunity Employer.**

**RESEARCH FORESTER.** USDA Forest Service, Northeastern Forest Experiment Station, Radnor, Pennsylvania. Salary range \$37,294 to \$48,480 per year. Position is with the Global Change Research Program. Research involves formulating an approach for modeling carbon storage and fluxes of carbon between terrestrial ecosystems and the atmosphere, and linking the model with econometric models used to project resource production. For more information, **telephone: 215-975-4035** before 15 December 1991.

**SCIENTIST.** To analyze and interpret experiment data on the transmission of the earth's atmosphere at millimeter and submillimeter wavelengths, and to accumulate real-time measurements of the 225-FHz atmospheric opacity and stability as transmitted by field radiometers. M.S. degree in physics or astrophysics plus 3 years of working experience in experimental geophysics and in radio astronomy are required; \$27,500 per year. Mail or hand carry résumé with a copy of the ad attached to: **VEC, Department 3008, 1202 Franklin Road, S.W., Roanoke, VA 24002-0061. Job Order #VA1102655.**

### OPENINGS FOR SCIENTISTS

The Weizmann Institute of Science is now offering a limited number of temporary appointments to the position of scientist.

Candidates must have completed 2 years of postdoctoral work.

Appointments will be made in all the areas of scientific research at the institute.

### BIOLOGY CHEMISTRY BIOCHEMISTRY-BIOPHYSICS PHYSICS MATHEMATICS SCIENCE TEACHING

Appointments are for a period of 1 year, however, they may be extended for a period not to exceed 5 years from receipt of Ph.D. degree (or equivalent). Successful appointees will be eligible to apply for promotion to the position of senior scientist.

Financial remuneration for a scientist is at the level of lecturer and includes all of the associated benefits. In addition, a relocation stipend is provided.

Application forms and additional information may be obtained from:

**The Feinberg Graduate School  
The Weizmann Institute of Science  
Rehovot, 76100 Israel**

Applications are reviewed twice each year: 1 January and 15 May.

**TECHNICAL STAFF-PHYSICS.** Ph.D. in physics. Two years of experience in the job offered or 3 years of experience as a postdoctoral appointee. Experience should include application of numerical and formal many-body techniques to studies of superconductivity, disordered systems, Fermi liquids and strongly correlated electronic systems. The above evidenced by a minimum of six publications in refereed scientific journals. Responsible for planning and implementing research which provides fundamental theoretical understanding, and interpretation of experimental results, in condensed matter physics. Salary: \$4492 per month; 40 hours per week/8:30 a.m. to 5:00 p.m. Send résumés to: **Illinois Department of Employment Security, 401 South State Street, 3 South, Chicago, IL 60605. Attention: D. Rule, Reference #V-IL 3745-R.** No calls. *Must have proof of legal authority to work permanently in the United States. An Employer-paid ad.*

## ANNOUNCEMENTS

### STRATEGIES FOR DELIVERY OF THERAPEUTIC PROTEINS IN INHERITED METABOLIC DISEASES

The National Institute of Diabetes and Digestive and Kidney Diseases will hold this interdisciplinary workshop at NIH, Bethesda, Maryland, between 29 to 31 January 1992 with the purpose of facilitating scientific exchange between experts in delivery/targeting of proteins, and basic or clinical researchers interested in these topics. **SCIENTIFIC SESSIONS:** *In Vivo Applications* (clinical and experimental successes, existing problems and strategies); *Cellular and Subcellular Targeting* (receptor-mediated and fluid phase endocytosis, lysosomal targeting, the mannose-6 phosphate and the transferrin receptors, delivery to cytoplasm and feasibility of protein delivery to mitochondria); *Central Nervous System Delivery* (transport across the blood brain barrier, hyperosmolar permeabilization, distribution in subarachnoid spaces, transendothelial transport, neuronal lysosomal targeting); *Promising Approaches and Techniques* (reconstituted viral envelopes, liposomes, protein conjugation, recombinant proteins/toxins, and modeling, immunogenicity, implantation of genetically engineered cells, and MRI monitoring); *Discussions* (speakers and attendees). **ORGANIZERS:** Dr. Mario C. Rattazzi and Dr. Robert Katz. **SPEAKERS:** Drs. R. Blumenthal; R. O. Brady; P. M. Friden; T. Friedman; J. Greer; M. S. Herschfield; A. L. Horvich; R. K. Jain; B. B. Johansson; A. Loyter; J. M. McPherson; E. A. Neuwelt; D. Papahadjopoulos; W. M. Pardridge; I. Pastan; S. I. Rapoport; M. C. Rattazzi; M. Rennels; W. S. Sly; J. A. Swanson; I. S. Trowbridge; R. Weissleder and M. Wilchek. For additional information please contact: **Ms. Mary K. Ries, Workshop Coordinator, Telephone: 301-496-7997; FAX: 301-496-9721.**

## MARKETPLACE

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# POSTDOCTORAL RESEARCH FELLOWSHIPS FOR PHYSICIANS

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## 1992 Competition

25 Fellowships will be awarded to physicians by the Howard Hughes Medical Institute for three years of training in fundamental biomedical research. Awards, based on an international competition each year, focus on research directed to an understanding of basic biological processes and disease mechanisms. Fellowships may be held at any academic or not-for-profit research institution, including but not limited to Hughes laboratories.

- **Fellowship Terms**
- Three years of support
  - Full-time fundamental research
  - \$35,000-\$50,000 annual stipend
  - \$15,000 research allowance
  - \$12,000 institutional allowance

- **Eligibility**
- M.D., M.D./Ph.D., M.B.B.S., or D.O., with the first medical degree awarded no earlier than 1982
  - At the start of the fellowship
    - at least two years of postgraduate clinical training completed
    - no more than two years of postdoctoral research training completed
  - Applicants (and fellows) may not have faculty appointments
  - Fellows may not be enrolled in graduate degree programs
  - No citizenship requirements: U.S. citizens may study abroad, but others must study in the United States

- **Schedule**
- Application deadline: March 1, 1992
  - Awards announced: September 1992
  - Fellowships start: January 1, 1993 - September 1, 1993

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## FOR 1992 PROGRAM ANNOUNCEMENTS AND APPLICATIONS

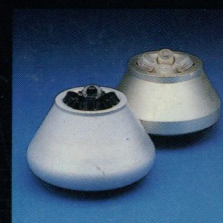
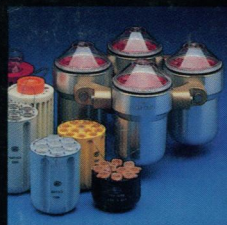
Howard Hughes Medical Institute  
Office of Grants and Special Programs  
Postdoctoral Research Fellowships for Physicians  
Department CC92  
6701 Rockledge Drive  
Bethesda, MD 20817, United States of America  
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The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

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