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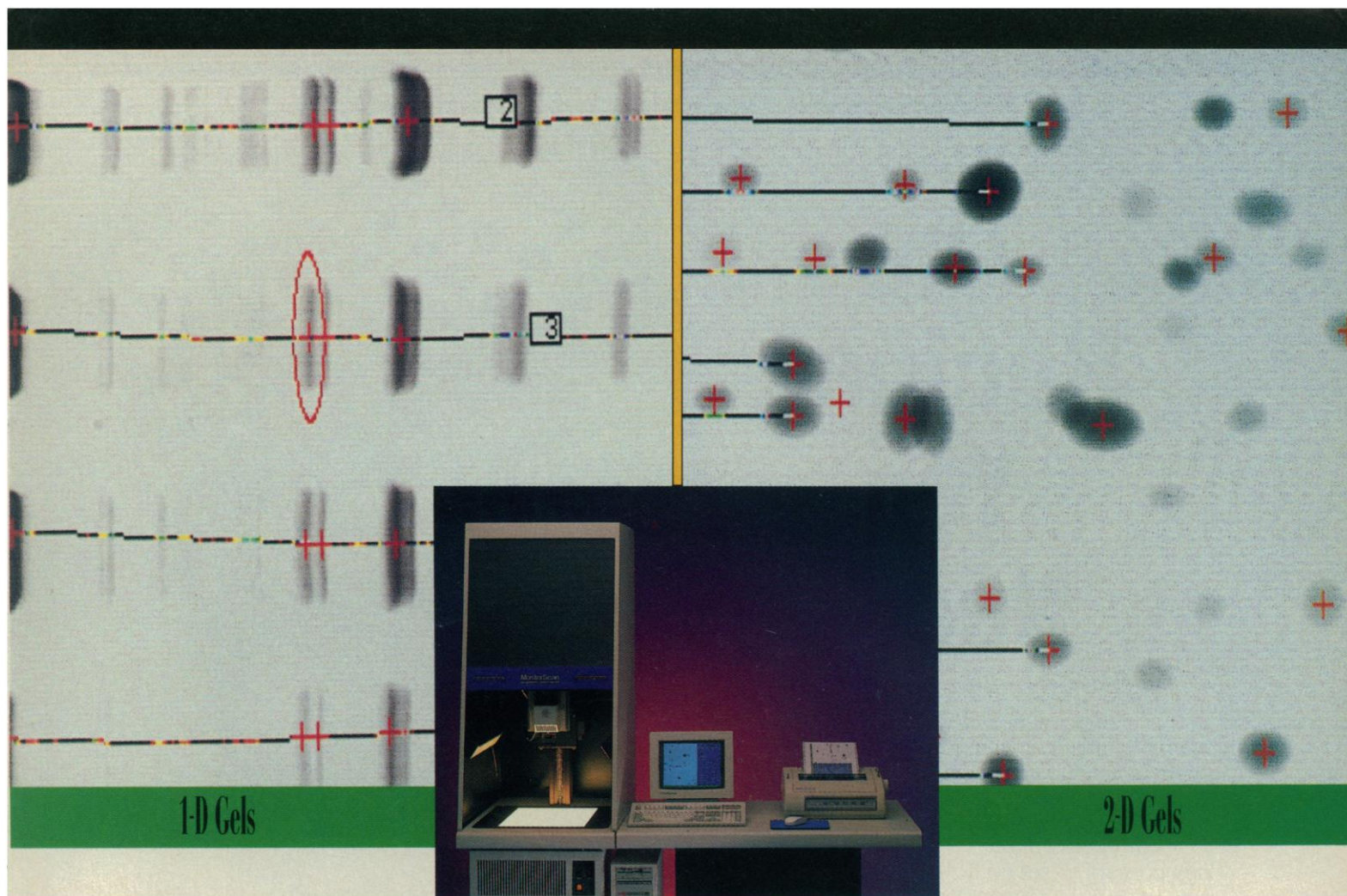
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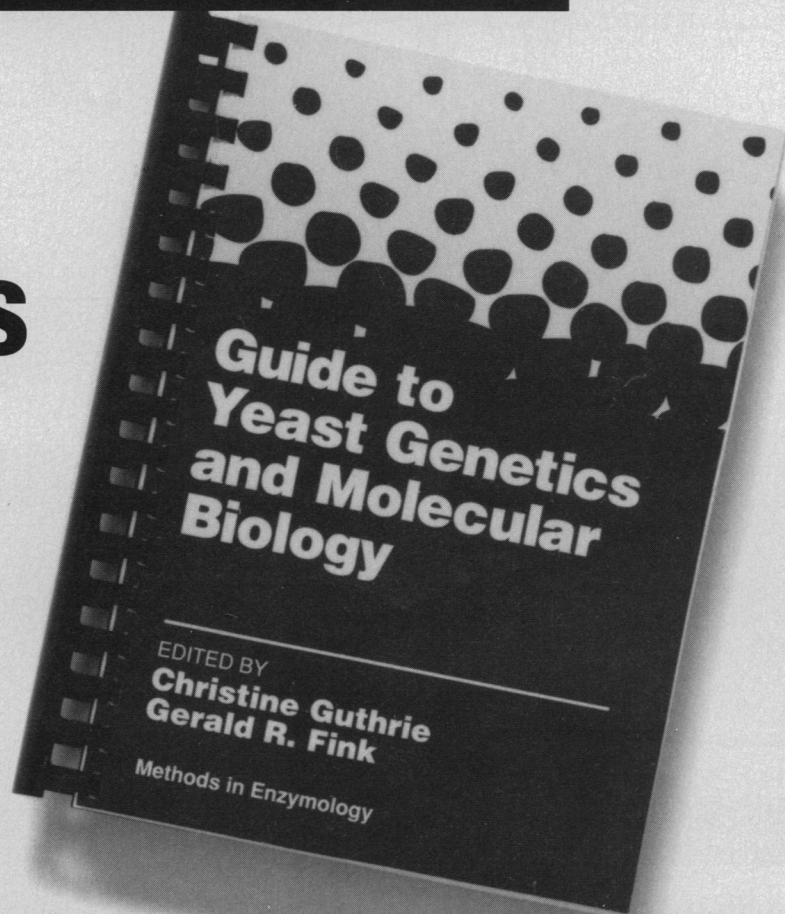
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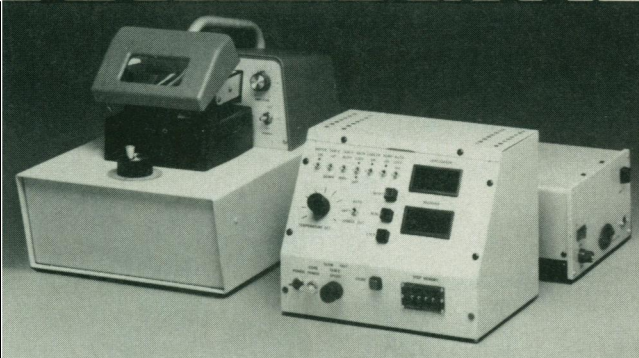
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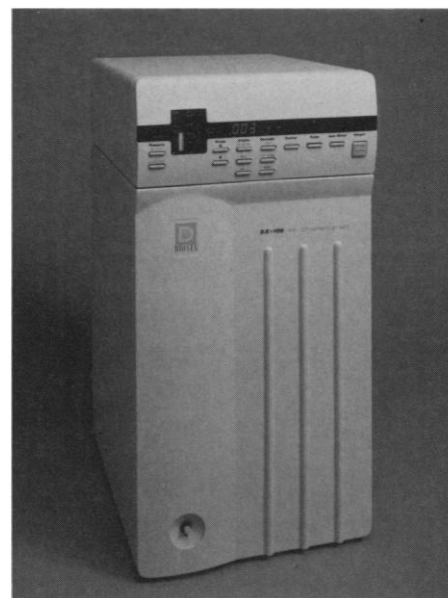
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## ASSISTANT PROFESSOR

The Department of Biology seeks a candidate holding the Ph.D. degree with a strong commitment to quality undergraduate teaching for a tenure-track position beginning September 1991. Teaching duties to include anatomy and physiology and biochemistry. Research that allows undergraduate participation is encouraged. Send résumé and arrange for three letters of reference to be sent to: **Dean Gloria Nemerowicz, Monmouth College, Cedar Avenue, West Long Branch, NJ 07764.** For full consideration, materials should be received by 1 February 1991. *Applications for minority candidates and women are strongly encouraged.*

## ASSISTANT PROFESSOR PLANT POPULATION BIOLOGY

Eastern Michigan University invites applications for a tenure-track faculty position available fall 1991. Candidates must be able to teach undergraduate and graduate courses in botany, ecosystem biology, and conservation and be committed to conducting research and directing graduate student research in the area of population ecology. Ph.D. and evidence of teaching excellence required. Submit letter of interest, curriculum vitae, transcripts, description of research interests, and three letters of reference by 7 January 1991 to: **Position FAAA91031, 310 King Hall, Eastern Michigan University, Ypsilanti, MI 48197. Affirmative Action/Equal Opportunity Employer.**

Ohio State University Department of Biochemistry invites applications for a 9-month, tenure-track faculty position at the level of **ASSISTANT PROFESSOR**, with the possibility for an exceptionally qualified individual of an appointment at a more senior level, available 1 October 1991 or later. We seek an individual with a strong background in molecular biology and in biochemistry, and are particularly interested in candidates with expertise in proteins and protein engineering. Candidates should have a Ph.D., postdoctoral experience, and a strong record of research productivity. Please submit a résumé, a concise statement of research interests, and the names and addresses of three references to: **Faculty Search Committee, Department of Biochemistry, Ohio State University, 484 West 12th Avenue, Columbus, OH 43210. Equal Opportunity/Affirmative Action Employer.**

**GENETICS, ASSISTANT PROFESSOR.** Indiana University at South Bend invites applications for a Ph.D. level tenure-track position in genetics beginning August 1991. Research expected. Teaching responsibilities include genetics lecture/laboratory, introductory biology courses. Deadline for applications is 31 December 1990 or until position is filled. Send résumé, transcripts, and three letters of recommendation to:

**Dr. Earl Savage, Biology**  
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## POSITIONS OPEN

The Natural Sciences Division (Biology) of Indiana University Southeast (IUS) has a tenure-track position of **ASSISTANT PROFESSOR** in plant physiology and plant systematics for August 1991. Qualifications: Ph.D. in plant physiology or related area. Requirements: Research experience using molecular and other modern techniques highly desirable. Will teach undergraduate courses in botany, general biology, a course in area of specialization, and pursue a research program that includes competition for available extramural funding. Required to demonstrate potential for excellence in teaching at undergraduate level. Individual research space will be provided, some research start-up funds available. Send letter of interest, curriculum vitae, academic transcripts, and three letters of recommendations by 10 December 1990 to: **Personnel Division, Chair of Search and Screening Committee, Plant Biology-Box 90-3, Indiana University Southeast, 4201 Grant Line Road, New Albany, IN 47150.**

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**MOLECULAR PLANT PHYSIOLOGIST, ASSISTANT PROFESSOR.** The Biology Department at Hobart and William Smith Colleges invites applications for a tenure-track position in molecular plant physiology, effective 1 July 1991. Teaching responsibilities include plant physiology, molecular biology, and a course in the candidate's specialty, as well as participation in the colleges' general curriculum. Qualifications include a Ph.D. and a desire to involve undergraduates in research. A new science facility is in development. Applications must include curriculum vitae, statements of teaching and scholarship goals, all transcripts, and three letters of recommendation. The closing date for applications is 11 January 1991. Send to: **Dr. Valerie M. Kish, Biology Department, Hobart and William Smith Colleges, Geneva, NY 14456. Equal Opportunity/Affirmative Action Employer.**

## ECOSYSTEM ECOLOGIST AND PLANT POPULATION ECOLOGIST

The Department of Botany, Iowa State University, is seeking an ecosystem ecologist and a plant population ecologist for its ecology group, which is part of a 40-member interdepartmental faculty in ecology and evolutionary biology. Both are tenure-track positions at the **ASSISTANT PROFESSOR** level, starting in August 1991. Ph.D. required. Salary is competitive and commensurate with experience. Successful candidates are expected to develop strong, externally funded research programs. Teaching responsibilities include a graduate course in area of specialization and an undergraduate course in botany or biology. Curriculum vitae, statement of research and teaching goals, reprints of publications, and three letters of recommendation should be sent by 31 December 1990 to: **Dr. Arnold van der Valk, Chair, Ecology Search Committee, Department of Botany, Iowa State University, Ames, IA 50011.**

*Iowa State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and members of other protected groups are encouraged to apply.*

**COGNITIVE DEVELOPMENT OR DEVELOPMENTAL PSYCHOBIOLOGY.** The Department of Psychology at the University of Tennessee, Knoxville (UTK), the flagship campus of the University of Tennessee system, is seeking to fill a tenure-track position at the **ASSISTANT PROFESSOR** level beginning fall 1991 in any area of developmental psychology. Ph.D. in psychology required. Preference is for candidates with a specialization in either cognitive development (including those with an interest in language) or developmental psychobiology (including those with an interest in comparative/ethological approaches). Responsibilities will include maintaining an active program of research as well as graduate and undergraduate teaching and advising. The department has 25 full-time faculty, doctoral programs in clinical and experimental psychology, approximately 130 graduate students, and about 625 undergraduate majors. New faculty are provided start-up funds and reduced teaching assignments. *Women and minorities are especially urged to apply.* The search committee will begin reviewing applications 15 January 1991. Send a letter of interest, curriculum vitae, representative reprints, and arrange for three letters of reference to be sent to: **Dr. Cheryl Travis, Chair, Search Committee, Department of Psychology, University of Tennessee, Knoxville, TN 37996-0900. UTK is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.**



## POSITIONS OPEN

**ASSISTANT PROFESSOR OF BIOLOGY.** The Department of Natural Science at Loyola University, Chicago, invites applications for a tenure-track position at the level of assistant professor. The applicant must have a well-defined interest and experience in teaching nonscience majors. A strong commitment to excellence in classroom teaching at the undergraduate level is required. The successful applicant will also be encouraged to conduct a research program, preferably within one of the following areas: human biology, genetics, evolution and environmental science, and science education. The Ph.D. degree is required. Please send curriculum vitae, statement of teaching and research interests, and three letters of reference by 31 January 1991 to: **Dr. Stephen M. Freedman, Chair, Department of Natural Science, Loyola University of Chicago, 6525 North Sheridan Road, Chicago, IL 60626.** Loyola University, Chicago, is an Equal Opportunity Educator and Employer.

### AQUATIC MICROBIOLOGY

Seek a tenure-track faculty member starting in August with preference given at the **ASSISTANT PROFESSOR** level. Should have postdoctoral experience and demonstrated research capability. Will be expected to establish an independent externally funded basic research program. Research area open, but could include ground water quality, bioremediation, or degradation of pollutants/xenobiotics. Substantial start-up funds available. Some teaching and interaction with the Nebraska Water Center expected. Joint/split appointments possible. Send curriculum vitae, statement of research interests, and three letters of recommendation to: **Dr. Kenneth W. Nickerson, School of Biological Sciences, University of Nebraska-Lincoln, NE 68588-0118.** Position open until 2 January but applications will be accepted until a suitable candidate is found. *Affirmative Action/Equal Opportunity Employer.*

### EUKARYOTIC MOLECULAR BIOLOGIST

The Department of Biological Sciences, Southern Methodist University (SMU), has expanded its facilities and faculty in molecular biology. We now invite applications for a tenure-track position at the **ASSISTANT PROFESSOR** level for an individual using the techniques of molecular biology to examine physiological processes. The area of study is flexible and individuals using invertebrate model systems are especially urged to apply. The successful candidate is expected to develop an independent research program that will attract extramural funding and to participate in undergraduate and graduate teaching programs. The main teaching responsibility will be a traditional undergraduate physiology course emphasizing vertebrate systems. Newly remodeled space, core facilities, and an attractive start-up package are available. Applications including curriculum vitae, descriptions of research interests, plans for future research, and names of three references should be sent by 1 January 1991 to: **Chair, Faculty Search Committee, Department of Biological Sciences, Southern Methodist University, Dallas, TX 75275.** SMU is an Equal Opportunity/Affirmative Action/Title IX Employer.

### CELL BIOLOGISTS

The Department of Anatomy and Cell Biology at the University of Florida invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level to be filled on or after 1 July 1991. The applicant should have a Ph.D. or equivalent, at least 2 years of postdoctoral experience and demonstrated ability to develop an independent research program. The candidate's research should be in one of the following areas: macromolecular targeting, organelle biogenesis, cell-cell or cell-matrix interactions. Individuals utilizing molecular approaches or modern imaging techniques are encouraged to apply. The appointee will be expected to take an active role in an expanding graduate program and participate in one of the following general courses taught by the department: developmental biology, cell biology, histology, or gross anatomy. Previous teaching experience is not required, but there must be a strong interest in becoming accomplished in one of these areas. Applicants should send a complete curriculum vitae with reprints and names of three references to: **Dr. Carl Feldherr, Chairman of Search Committee, Department of Anatomy and Cell Biology, Box J-235 JHMH, University of Florida College of Medicine, Gainesville, FL 32610-0235.** Application deadline: 15 January 1991.

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

## POSITIONS OPEN

The Department of Brain and Cognitive Sciences at the Massachusetts Institute of Technology (MIT) anticipates hiring a tenure-track **ASSISTANT PROFESSOR** in cognitive science and experimental psychology, with a preferred focus in one of the following areas: (i) perception and cognition (e.g., attention, object recognition, speech recognition); (ii) reasoning or decision making; and (iii) cognitive neuroscience (e.g., human neuropsychology, the relation of neural maturation to cognition, learning and memory). The person filling the position will be expected to maintain an active experimental research program and to participate in the department's educational programs in cognitive science at the undergraduate and graduate levels. Applications must include a brief cover letter stating the candidate's research and teaching interests, a résumé, and at least three letters of recommendation; representative reprints may also be included. Send applications by 15 January 1991 to: **Cognitive Science Search Committee, Attention: Steven Pinker, E10-018, MIT, 79 Amherst Street, Cambridge, MA 02139.** *Qualified women and minority candidates are especially encouraged to apply. MIT is an Affirmative Action/Equal Opportunity Employer.*

### EVOLUTIONARY GENETICIST UNIVERSITY OF NEVADA, RENO

Tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Twelve-month appointment; 75% in the Department of Biology, 25% in the Agricultural Experiment Station. Research specialization in the genetics of natural populations with a strong interest in conservation applications. Qualifications include demonstrated ability to use modern molecular techniques. Responsibilities will be to develop a strong, externally funded research program; train graduate students; and participate in graduate and undergraduate courses in genetics and evolution. Ph.D., publications, and postdoctoral experience required.

Applicants should send a letter outlining their research interests, current curriculum vitae, and the names, addresses, and telephone numbers of three references to: **Dr. Peter F. Brussard, Chairman, Department of Biology, University of Nevada, Reno, NV 89557.** Application review begins after 1 January 1991 and will continue until position is filled.

*An Affirmative Action/Equal Opportunity Employer.*

## BIOLOGICAL SCIENCES

**CELL/MOLECULAR PHYSIOLOGIST.** A tenure-track **ASSISTANT PROFESSOR** position is anticipated for fall 1991. The department is accepting applications from investigators with research experience in cell signal transduction. Areas of specific interest may include receptor proteins, ion channels, second messengers, protein kinases, protein/DNA interactions, and oncogenes. The successful candidate will be expected to maintain a vigorous research program, actively seek extramural funding, and direct M.S. and Ph.D. students. Teaching duties will include a general biology course and an upper level course in the candidate's area of expertise. A Ph.D. and postdoctoral experience are required.

Send a letter of interest, curriculum vitae, brief statement of research goals, representative reprints, and three letters of reference by 31 January 1991 to: **Dr. Marvin Starzyk, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115-2861.** Telephone: 815-753-1753. *Northern Illinois University is an Affirmative Action/Equal Opportunity Employer.*

**PLANT ECOLOGIST.** We are seeking a plant ecologist with quantitative skills whose research interests are in population and/or community ecology. This is a tenure-track position at the **ASSISTANT PROFESSOR** level. A Ph.D. is required and postdoctoral experience desirable. The successful candidate will be expected to initiate an independent research program in population and/or community ecology, seek extramural funding, develop courses in ecology, and teach in the introductory botany program. Nine-month salary: from \$26,000 depending on experience. Send curriculum vitae, college transcripts, copies of reprints, a synopsis of research goals, and at least three letters of recommendation to: **Dr. Ivan K. Smith, Chair, Department of Botany, Ohio University, Athens, OH 45701** by 15 January 1991.

*Ohio University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**ENTOMOLOGIST.** Tenure-track **ASSISTANT PROFESSORSHIP** available from fall of 1991 in systematic or comparative biology of insects at the Department of Zoology, University of Texas at Austin. Teaching responsibilities will include general entomology. Resources available at The University of Texas include the Texas Memorial Museum and the Brackenridge Field Laboratory. Applicants should submit curriculum vitae, selected reprints, a brief outline of research interests, and the names of five potential referees to: **Chairman, Department of Zoology, University of Texas, Austin, TX 78712-1064** before 1 January 1991.

*The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

### COMPARATIVE ANATOMIST

The Biology Department invites applications from qualified candidates for a tenure-track position at the **ASSISTANT PROFESSOR** level. A Ph.D. and a commitment to teaching undergraduate students is required. Research interests should be in some area of evolutionary biology or comparative anatomy of some group of marine vertebrates. Candidate must be able to teach undergraduate courses in comparative vertebrate anatomy, general biology, and human anatomy.

Send curriculum vitae, statement of teaching and research interests, reprints of published research, and the names of three persons we might contact as references to:

**Dr. James W. Smiley, Chairman  
Department of Biology  
College of Charleston  
Charleston, SC 29424**

Applications will be accepted until 1 January 1991.

*The College of Charleston is an Equal Opportunity Employer.*

A major affiliate hospital of the Department of Radiology at the University of Minnesota has one nontenure-track position available at the rank of **ASSISTANT PROFESSOR** beginning 1 July 1991. At the assistant professor level, minimum requirements are a Ph.D. in organic chemistry, 2-year postdoctoral specialty training or experience in PET radiochemistry, and a demonstrated involvement in quality research accepted or published in peer-reviewed journals including demonstrated expertise in synthetic organic chemistry. Responsibilities will include heading up a four-person cyclotron/radiochemistry group reporting to the Director of the PET Service at the Veterans Administration Medical Center as well as graduate and undergraduate medical instruction. Research performance is required and will be evaluated. Salary is negotiable and competitive, and is dependent upon past scholarly productivity and postdoctoral experience. Applications will be accepted through 31 December 1990. Send curriculum vitae, bibliography, and letters of recommendation to: **D. A. Rottenberg, M.D., Director, VAMC/UMHC PET Program, Veterans Administration Medical Center, One Veterans Drive, Minneapolis, MN 55417.** *The University of Minnesota is an Equal Opportunity Educator and Employer, and specifically invites and encourages applications from women and minorities.*

### FROSTBURG STATE UNIVERSITY (FSU) DEPARTMENT OF BIOLOGY

B.S. and M.S. degrees in biology, wildlife, and fisheries management offered for approximately 250 majors.

**PLANT TAXONOMY:** Full-time, tenure-track, **ASSISTANT PROFESSOR** position available fall 1991, subject to funding and/or approval to hire. Reopened search. Teach plant taxonomy, dendrology and may participate in introductory biology classroom activities. FSU/department service and research, typically in area of specialization. Required: Ph.D. (at time of appointment) and knowledge of eastern North American flora. Knowledge of tropical flora desirable, as well as broad background in botany. Salary commensurate with degree status, work, and teaching experience. Position offers benefits package afforded University of Maryland System employees. Telephone inquiries to: **Dr. Wayne A. Yoder, Chair, 301-689-4177.** Submit letter of interest (detailing relevant qualifications), résumé, graduate and undergraduate transcripts, summary of teaching evaluations/evidence of teaching skills (if available) and names, addresses, and telephone numbers of at least three professional references, not later than 8 December 1990 to: **Mr. C. Douglas Schmidt, Director of Personnel Services, Frostburg State University, Frostburg, MD 21532.** *Affirmative Action/Equal Opportunity Employer.*



**Immunologists / Virologists  
Assistant Professors of  
Microbiology and Immunology  
University of Illinois  
College of Medicine at Chicago**

The Department of Microbiology and Immunology seeks applications at the level of Assistant Professor, tenure track, from individuals with demonstrated excellence in molecular or cellular Immunology and Virology (separate positions). More senior applicants will also be considered. The successful candidates will be expected to develop strong externally funded research programs and to participate in an established graduate training program and in teaching medical students. Generous space and start-up funds are available. Applicants should provide the appropriate Search Committee with a Curriculum Vitae, at least three letters of recommendation and a brief statement of future research interests and plans. The first series of candidates will be considered after October 1, 1990, and applications will be accepted until the positions are filled. Starting dates can be September, 1991, or shortly thereafter.

Send application to: A. L. Kenter and E. P. Cohen (Immunology Search Committee) or W. Walden and N. Khoobyarian (Virology Search Committee), Department of Microbiology and Immunology (M/C 790), University of Illinois College of Medicine at Chicago, P.O. Box 6998, Chicago, IL 60680.

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

**YALE UNIVERSITY SCHOOL OF  
MEDICINE  
DEPARTMENT OF HUMAN GENETICS  
MEDICAL GENETICIST**

The Department of Human Genetics invites applications for a tenure track faculty position in a stimulating environment that includes excellent laboratory and clinical facilities. This faculty appointment will be made at the level of Assistant or Associate Professor, depending on the credentials of the successful candidate. We seek a person with an M.D. or M.D./Ph.D. degree in addition to a strong record of accomplishment in research and experience in clinical genetics. Applicants should submit a curriculum vitae, reprints, and a statement of research interests, and should arrange to have three letters of recommendation sent to:

Chairman, Faculty Search Committee  
ATTN: Mrs. Sherman  
Department of Human Genetics  
Yale University School of Medicine  
P.O. Box 3333  
New Haven, CT 06510

The deadline for applications is  
March 1, 1991.

*Yale is an Equal Opportunity  
Affirmative Action Employer.*

**POSITIONS OPEN**

**PLANT ECOLOGIST.** Applications are invited for a tenure-track position as **ASSISTANT PROFESSOR** to start fall 1991. The successful candidate will have a Ph.D. in an appropriate field and expertise in experimental, quantitative, or theoretical plant ecology, will develop a vigorous research program, and will be expected to teach undergraduate and graduate courses in ecology and botany. Submit curriculum vitae, names, addresses, and phone numbers of three or more references and separate statements of teaching and research interests to: **Dr. Vincent P. Gutschick, Department of Biology, 3AF, Box 30001, New Mexico State University (NMSU), Las Cruces, NM 88003.** Screening of applications will begin 14 December 1990. *NMSU is an Equal Opportunity/Affirmative Action Employer.*

**PLANT BIOLOGY  
THE OHIO STATE UNIVERSITY**

This is a 9-month, tenure-track position at the **ASSISTANT PROFESSOR** level. We seek a Ph.D. plant biologist who is utilizing modern approaches to the study of any of the three following areas: ecophysiology, molecular evolution, or stress physiology. Postdoctoral experience is preferred. It is expected that the successful candidate will develop a vigorous, externally funded research program, direct graduate students, teach an advanced course in his/her specialty area, and teach one course in a sequence in plants, people, and the environment for nonscience majors. Salary is negotiable. Send curriculum vitae, reprints, statement of research interests and teaching philosophy, and three letters of recommendation by 15 December 1990 to: **Dr. D. J. Crawford, Search Committee, Department of Plant Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210.** *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are strongly encouraged.*

**MOLECULAR BIOLOGY**

**ASSISTANT PROFESSORSHIP;** tenure-track; opening anticipated for fall of 1991. Successful candidate must have recent Ph.D., no more than 5 years of teaching experience, broad biological background, and specialty in molecular biology. Teaching responsibilities will include molecular/cellular semester of general biology, microbiology, and course in molecular genetics or molecular biology.

Excellent undergraduate teaching is highest priority; research program involving undergraduates is expected. Experience in small college setting desirable; candidate will join active department of eight.

Ursinus College is northwest of Philadelphia in suburban setting and is highly selective, residential, co-ed, liberal arts college of 1100 students with long tradition of academic excellence and strength in sciences.

Send letter of application and curriculum vitae to: **Dr. Peter F. Small, Biology Department, Ursinus College, Collegeville, PA 19426,** by 31 January 1991. *Equal Opportunity Employer/Affirmative Action.*

**ASSISTANT PROFESSOR  
NEUROBIOLOGY  
UNIVERSITY OF CALIFORNIA, RIVERSIDE**

The Department of Biology, University of California, Riverside, invites applications for a tenure-track position in neurobiology. The appointment will be effective 1 July 1991 with duties commencing in September, and will be made at the assistant professor level.

Requirements for the position include postdoctoral training, demonstrated excellence in research, and a commitment and ability to teach. Preference will be given to candidates in behavioral or systems neurobiology.

The successful candidate will be expected to establish a strong research program, teach undergraduate and graduate courses, and participate in the interdepartmental Neurosciences Program.

To apply, send curriculum vitae, statement of research and teaching interests, copies of representative publications, and arrange to have sent three to five letters of recommendation by 15 January 1991 to: **Neurobiology Search Committee, Department of Biology, University of California, Riverside, CA 92521.**

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

More than 150,000 people paid to see your ad in **SCIENCE**. Classified Advertising Department telephone: 202-326-6555. FAX: 202-682-0816.

**POSITIONS OPEN**

**BIOLOGIST**

The Department of Biology at Southwest Missouri State (SMS) University invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning August 1991. Teaching duties will include introductory biology for nonmajors and one course in the applicant's area of interest. The successful candidate will also be expected to seek outside funding to support an active research program. Area of expertise is open, although special consideration will be given to areas presently underrepresented in the department. Applicants must possess a Ph.D. in the biological sciences and show evidence of interest and experience teaching introductory biology. Applicants should send curriculum vitae, transcripts, and the names and addresses of three references by 15 January 1990 to: **Dr. Steve Jensen, Biologist Search Committee, Department of Biology, Southwest Missouri State University, 901 South National, Springfield, MO 65804.**

*As an Affirmative Action/Equal Opportunity Employer, SMS invites applications from minorities and women.*

**CELL BIOLOGIST**

California State University, San Marcos, north of San Diego, invites applicants for a tenure-track **ASSISTANT/ASSOCIATE PROFESSORSHIP** in biology with responsibility for a core course in cell biology and courses related to his/her specialty.

Research interest in fundamental aspects of cell biology, especially as applied to problems in neurobiology, photosynthesis, or immunology, is especially desirable, although all applications are encouraged. Postdoctoral experience is required. Send letter of application, curriculum vitae, and statement of research and teaching interests and accomplishments by 21 December 1990 and arrange to have three letters of reference sent to: **Dr. Larry W. Cohen, California State University, San Marcos, 820 West Los Vallecitos, San Marcos, CA 92069-1477.** *An Affirmative Action/Equal Opportunity Employer. Women and ethnic minorities are strongly encouraged to apply.*

**ASSISTANT OR ASSOCIATE PROFESSOR  
DEPARTMENT OF GEOGRAPHY  
AND EARTH RESOURCES**

Half-teaching, half-research position assistant or associate professor jointly in the Department of Geography and Earth Resources and the Ecology Center at Utah State University. Tenure-track, academic year position, Ph.D. in meteorology or closely related field, established record of scholarship in meso-scale meteorology. Conduct research linking the atmosphere to surface hydrologic and biosphere processes at various scales, collaborate with people working in these areas, help develop a multidisciplinary weather research lab, develop own research program in applied meteorology, and teach two or three specialty courses. Send curriculum vitae and names of four referees to: **Ted J. Alsop, Chair Search Committee, Department of Geography and Earth Resources, Utah State University, Logan, UT 84322-5240.** Deadline 1 January 1991 or until suitable candidate is found. *Utah State University is an Affirmative Action/Equal Opportunity Employer.*

**PSYCHOBIOLOGY.** The University of Louisville Department of Psychology invites applications for an **ASSISTANT/ASSOCIATE PROFESSOR**, tenure-track position in the area of psychobiology beginning no later than August 1991. Area of specialization is open. Some specific areas of interest are human or animal electrophysiology, sensory physiology, and brain function. We seek candidates with outstanding research credentials and the ability to contribute to the training of graduate students in psychobiology as well as to teach courses in their specialty area. Ability to teach undergraduate experimental methods and statistics is desirable. Applicants must have a Ph.D. (or completed requirements prior to effective date of appointment). Send nonreturnable application materials of: curriculum vitae, three letters of recommendation, reprints/preprints, and laboratory start-up requirements to: **Dr. Edward A. Essock, Psychobiology Search Committee, Department of Psychology, University of Louisville, Louisville, KY 40292.** Review of applications will begin 10 December 1990 and continue until position is filled. *The University of Louisville is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are strongly encouraged.*



## POSITIONS IN ECOLOGY

The Department of Biology at **Memphis State University** invites applications for two tenure-track positions (one assistant, one associate professor level). The search will emphasize **Behavioral Ecology**, **Ecotoxicology**, or **Population Ecology**. Special consideration will be given to individuals that combine one or more of these disciplines with experience in wetland research. Ecologists with other interests are also encouraged to apply. Expectations include the development of an externally funded research program, interaction with other faculty in the area, and a commitment to teaching that includes attracting and directing graduate students at the M.S. and Ph.D. levels. Teaching duties include participation in the general biology program and graduate specialty courses. Earned doctorate, research experience, and strong publication record are required.

The Department of Biology is committed to building a program of excellence in Environmental Biology. Advertised positions compliment an existing strong environmental group and excellent research facilities that include the Edward J. Meeman Biological Station and the Ecological Research Center. The Biological Station (a 623-acre facility located about 23 miles north of the University and near the Mississippi River) houses both research and teaching facilities. Proximity of the Station to the Mississippi River, to numerous wetland habitats located in the Mississippi River Flyway, and to adjacent state and federal wildlife management areas affords numerous research opportunities. The Research Center is located on the South Campus and houses aquaculture and wildlife research facilities as well as a U.S. Fish and Wildlife Service Office dealing with migratory birds.

Candidates should send a letter of application, curriculum vitae, a maximum of five selected reprints, a statement of research/teaching interests and goals, and names and addresses of five references to Dr. Michael L. Kennedy, Chairman of Ecology Search Committee, Department of Biology, Memphis State University, Memphis, TN 38152. Evaluation of applicants will begin 15 February 1991 and continue until a suitable candidate is identified. Successful candidates must meet Immigration Reform Act criteria. Memphis State University is an equal opportunity/affirmative action employer committed to education of a non-racially identifiable student body.



## DEPARTMENT OF PHARMACOLOGICAL AND PHYSIOLOGICAL SCIENCE

### SAINT LOUIS UNIVERSITY MEDICAL CENTER

Applications are invited for up to six new positions to be filled over the next three years in the newly created **Department of Pharmacological and Physiological Science** at Saint Louis University Medical Center. Positions are tenure track appointments at the **Assistant Professor** or **Associate Professor** level. At the **Assistant Professor** level, the candidate should have a period of productive post-doctoral training and will be expected to develop a strong, independent, fundable research program; and participate in medical, allied health and graduate student teaching. At the **Associate Professor** level, the candidate should have a record of peer reviewed grants, research publications and participation in teaching. Preference will be given, but not restricted, to individuals with demonstrated experience in the application of molecular biology to research in the nervous, cardiovascular or endocrine systems. We offer an environment rich in senior level scientific experience, start up funds, laboratory space and a record of highly successful and continuing extramural research and training funding. Interested persons should send a curriculum vitae and bibliography, record of grant support, a statement of research interests and objectives, and letters from at least 3 references to:

**Dr. Thomas C. Westfall**  
*William Beaumont Professor and Chairman*  
*Department of Pharmacological and Physiological Science*  
*St. Louis University Medical Center*  
*1402 South Grand Boulevard*  
*St. Louis, MO 63104*

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

## CELL AND MOLECULAR BIOLOGISTS

The Department of Cell and Structural Biology at the University of Illinois, Urbana-Champaign, is continuing the expansion of its faculty. A position at the **ASSISTANT PROFESSOR** level is available for the 1991-1992 academic year. Applicants should hold the Ph.D. degree or equivalent, and show exceptional promise in research in the areas of cell, developmental, or neural biology. Responsibilities will include participation in teaching in these areas. Salary will be commensurate with experience.

Substantial start-up funds and laboratory facilities are available to initiate new faculty research programs, for which the UIUC offers exceptional and broad-based supporting resources. These resources include a Transgenic Animal Facility; the Center for Electron Microscopy; the Genetic Engineering Facility, providing oligonucleotide and peptide synthesis and automated protein sequencing; the Cell Science Laboratory, which contains hybridoma and flow cytometry facilities; a molecular graphics facility; subsidized shops and animal care facilities; and a superb university library system. The UIUC is a National Center for Supercomputing Applications, and is home to the Beckman Institute for Advanced Science and Technology, which combines research in the physical and biological sciences. Many other units within the Schools of Life Sciences and Chemical Sciences, and the Colleges of Medicine and Engineering offer opportunities for interactions in the cellular and molecular sciences.

Urbana-Champaign combines the residential advantages of a medium-sized city (population 120,000) with outstanding cultural amenities within the University, and its location in east-central Illinois gives easy access to the cities of Chicago and St. Louis.

Applicants are requested to send a curriculum vita, a summary of research interests, and three letters of reference to: **Dr. Byron Kemper, Search Committee Chairman, Department of Cell and Structural Biology, University of Illinois, 506 Morrill Hall, 505 South Goodwin Avenue, Urbana, Illinois 61801, Telephone: (217) 333-6118.**

In order to ensure full consideration, applications should be received by December 15, 1990. Interviews may be conducted before December 15, 1990, but all applications received by that date will receive full consideration and the final selection will not be made until after that date.

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

## GENE TRANSFER

**VIAGENE, INC.**, a biopharmaceutical company developing a new generation of gene transfer-based therapeutics for the treatment of viral diseases and cancers, is currently recruiting for the following positions:

### DIRECTOR QUALITY CONTROL / QUALITY ASSURANCE

Responsible for the development and implementation of QA/QC procedures for biological therapeutics including hiring, training and supervision of staff. Candidate should have B.S. or M.S. degree plus 5-8 years of relevant experience. Individuals with molecular biology, virology, mammalian cell production and immunology backgrounds are preferred.

### DIRECTOR SCALE-UP & PROCESS DEVELOPMENT

Responsibilities include design and operation of mammalian cell culture systems and associated facilities, cell line and media optimization, cell banking, small scale GMP production, and process development. Requires Ph.D. with emphasis in cell biology/virology with 7 years minimum industry experience, demonstrated ability to lead, motivate and supervise. Must have produced therapeutic products under cGMPs.

### SENIOR SCIENTIST / CELL BIOLOGIST

Seeking an individual with Ph.D. and 4 or more years experience in human primary normal and neoplastic cell culture, tumor models and human virology to form and lead cell biology contributions to several exciting cancer and viral immunotherapeutic projects. Industrial and supervisory experience preferred.

**VIAGENE, INC.** offers an exciting and challenging environment and an attractive salary and benefits package. Please submit resume/cv to:

Human Resources, VIAGENE, INC.  
11075 Roselle Street, San Diego, CA 92121.  
An Equal Opportunity Employer.



**Viagene, Inc.**

## POSITIONS OPEN

### MOLECULAR DEVELOPMENTAL BIOLOGY

The Department of Cell Biology and Neuroanatomy at the University of Minnesota is seeking highly qualified candidates for a position in molecular developmental biology of eukaryotes. Appointment can be either at the **ASSISTANT PROFESSOR** (tenure track; requires involvement in quality research accepted or published in peer-reviewed journals) or **ASSOCIATE PROFESSOR** (tenured; requires professional distinction in research and writing and effectiveness in teaching and advising) level. Applicants must have a relevant graduate degree (Ph.D. and/or M.D. or equivalent foreign degree) with at least 2 years of productive postdoctoral experience. It is expected that the successful candidate will complement and extend existing research strengths in the department. Current focuses in the department include cell and molecular biology of cytoskeleton and membranes, and cellular developmental neurobiology. Required teaching will be in the medical/dental school curriculum. Training of graduate students and postdoctoral fellows, as well as teaching at the graduate level is expected.

Applications (to be received no later than 18 January 1991) containing current curriculum vitae, a statement of research goals, three letters of assessment, and any other relevant information should be sent to: **Developmental Biology Search Committee, Department of Cell Biology and Neuroanatomy, 4-135 Jackson Hall, 321 Church Street S.E., Minneapolis, MN 55455.**

*The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

The University of California, San Francisco (UCSF), in cooperation with the Lawrence Berkeley Laboratory (LBL), is seeking a candidate for appointment as the **LIFE SCIENCES, ADVANCED LIGHT SOURCE (ALS) PROFESSOR**. Candidates must be well established in scientific pursuits using experimental approaches in the study of the structure and function of biologic molecules and molecular assemblages. The LBL/ALS resource will provide the potential for studies in biological imaging of cells, spatially resolved spectroscopy, protein crystallography, and time-resolved x-ray scattering from macromolecules. The position is a joint appointment in an appropriate department of the School of Medicine at UCSF and in a Life Sciences Division of LBL. The candidate is expected to establish a strong research group in one of these fields and to teach graduate students and postdoctoral fellows at LBL and UCSF. The successful candidate will assume a leadership role in developing ALS as a major research tool in structural biology. Send résumé and names and addresses of three references to: **Thomas F. Budinger, M.D., Ph.D., Division Director, Research Medicine/Radiation Biophysics, c/o Lawrence Berkeley Laboratory, Employment Office, M.S. 90/1042, Position A/6086, #1 Cyclotron Road, Berkeley, CA 94720. Equal Opportunity/Affirmative Action Employer.**

### PROFESSOR OF GENETICS SCHOOL OF BIOLOGICAL SCIENCES

Applications are invited for the Chair of Genetics within the Department of Genetics in the School of Biological Sciences. Applicants with research interests in any area of genetics are encouraged to apply. The department currently has a diversity of active research groups whose work ranges from prokaryotic systems, fungi, and yeast to fruit fly behavior and the human genome. It is expected that the successful candidate will provide academic leadership for the department, which, as a member of the Faculties of Science and Medicine, runs successful undergraduate and M.Sc. programs within the School of Biological Sciences and contributes to preclinical teaching within the Medical School. It is also expected that he/she will act as head of the department.

Informal inquiries may be made to: **Dr. Peter Williams or Professor Alec Jeffreys, Department of Genetics, telephone: 0533-523438.**

Salary will be negotiated within the professorial range; current minimum: £27,013.

Further particulars may be obtained from: **The Staffing Office (Academic Appointments), University of Leicester, University Road, Leicester LE1 7RH, England. Telephone: 0533-522439.**

United Kingdom candidates should submit 15 copies of their application (overseas candidates may submit one copy). The university FAX number is 0533-522200.

Closing date for applications: 14 December 1990.

## POSITIONS OPEN

**ASSISTANT/ASSOCIATE PROFESSOR.** Biochemistry, cell/molecular biology; Ph.D. with demonstrated research skills. Tenure track in a new department; adequate start-up funds; competitive salary. Submit curriculum vitae, research interests, references to: **David V. Cohn, Ph.D., Department of Oral Health, Health Sciences Center, University of Louisville, Louisville, KY 40292. Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY/TOXICOLOGY

Applications are invited for a tenure-track position in the College of Pharmacy, Idaho State University (ISU). A Ph.D. and postdoctoral research experience are required. In addition to instructing Pharm.D. and Ph.D. students, the successful applicant will maintain an active research program. Research areas of particular interest include reproductive or pulmonary pharmacology/toxicology, risk assessment, or neuropharmacology. Please send curriculum vitae, statement of interests, and three letters of reference to: **Dr. Thomas LaHann, Campus Box 8334, Idaho State University, Pocatello, ID 83209. ISU is an Affirmative Action/Equal Opportunity Employer.**

### IMMUNOLOGIST, Ph.D.

Department of Surgery, University of California, San Diego (UCSD). Available 1 July 1991 to develop immunology laboratory in support of active clinical transplantation service. Emphasis on novel approaches to immunosuppression and immunologic monitoring. Ample opportunity will exist for developing basic research program. Opportunity to teach fellows and postgraduate students. Applicant should (i) have established reputation and track record of productivity, (ii) have experience and interest in developing cooperative clinical/basic science ventures, and (iii) be qualified for appointment at the **ASSOCIATE PROFESSOR** level. Closing date is 15 January 1991. Salary per published UC scale. Please send applications with curriculum vitae, selected publications, and the names of three references to: **N. A. Halasz, M.D., UCSD Medical Center, H-810-A, 225 Dickinson Street, San Diego, CA 92103. Affirmative Action/Equal Opportunity Employer.**

Applications are invited for the position of **ASSOCIATE PROFESSOR IN BIOCHEMISTRY** (tenure-accurring track) with a secondary appointment in obstetrics and gynecology. The position carries with it an appointment to the Cecil H. and Ida Green Center for Reproductive Biology Sciences. Candidates should have a background in reproductive endocrinology as well as molecular biology and an established research program in the area of steroid hormone biosynthesis in human organs of reproduction. The appointee will be expected to maintain a strong and independently funded research program, as well as enter into collaborative projects with other members of the center, and will participate, in addition, in the teaching activities of the biochemistry and obstetrics and gynecology departments. Applicants should send curriculum vitae, together with the names of three referees, to:

**Evan R. Simpson, Ph.D.  
Cecil H. and Ida Green Center  
for Reproductive Biology Sciences  
Southwestern Medical School  
5323 Harry Hines Boulevard  
Dallas, TX 75235-9051**

*The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT/ASSOCIATE FULL PROFESSOR

The Department of Environmental Health in the School of Public Health and the Department of Biochemistry in the School of Medicine are extending their joint research for a molecular/cellular biologist with a strong interest in molecular toxicology to fill a full-time permanent faculty position. The successful candidate will be expected to have or develop a research program with independent support and to participate in teaching at the graduate level. Rank will be commensurate with experience. Send curriculum vitae, names of three references, and a brief summary of research interests by 15 February 1990 to: **Patricia Foster, Chair, Joint Search Committee, Department of Environmental Health, Boston University School of Public Health, 80 East Concord Street, T3C, Boston, MA 02118. Boston University is an Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**MOLECULAR BIOLOGIST.** The Department of Obstetrics and Gynecology at the Medical College of Georgia seeks an **ASSISTANT/ASSOCIATE PROFESSOR** with expertise in the molecular biology of developmental systems. This is a tenure-track faculty position with salary and rank commensurate with background. The applicant should have an independent program, but is expected to cooperate with ongoing programs within and outside the department. *The Medical College of Georgia is an Equal Opportunity/Affirmative Action Institution.* Send curriculum vitae to: **Donald M. Sherline, Chairman, Department of Obstetrics and Gynecology, Medical College of Georgia, Augusta, GA 30912.**

### CHAIR, DIVISION OF MARINE BIOLOGY AND FISHERIES ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE UNIVERSITY OF MIAMI

The division seeks a senior scientist as chair and professor. Applicants should have a history of strong scientific productivity, experience in dealing with funding agencies, and demonstrable administrative skills. The applicant's field of research should fall within the overall purview of the division. Preference will be given to applicants who can develop cooperative, interdisciplinary research programs.

The division has 20 faculty and 60 graduate students and \$2,154,000 in current research grants and contracts with dynamic and diversified interests in fields such as microbiology, ethology, marine population dynamics and fishery management, invertebrate zoology, ichthyology, systematics, marine toxicology, coral reef ecology, mangrove ecology, and plankton. Applicants should send curriculum vitae and a summary of past experience and future research plans by 15 January 1991. Applications should be sent to: **Chair, Search Committee, Division of Marine Biology and Fisheries, Rosenstiel School of Marine and Atmospheric Science, University of Miami, 4600 Rickenbacker Causeway, Miami, FL 33149. For additional information, contact 305-361-4177.**

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

**CHAIRPERSON.** Faculty of Biological Science, University of Tulsa. Nominations and applications are invited for the position of Chairperson of the Faculty of Biological Science, a 16-member department offering B.S., M.S., and Ph.D. degrees in biology. Candidates are expected to have a consistent record of research excellence and national funding along with a concern for quality teaching at undergraduate and graduate levels. The successful candidate will participate in guiding the development of graduate programs in biology and in filling several vacancies. Salary will be competitive. The appointment will commence 1 September 1991. Screening of applications will begin 1 December 1990. Applicants should send curriculum vitae, recent reprints, and names of at least three references (with addresses and telephone numbers) to: **Chair, Search Committee, Faculty of Biological Science, University of Tulsa, Tulsa, OK 74104. The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.**

**CHAIRPERSON, DEPARTMENT OF NEUROLOGY.** The State University of New York (SUNY) at Stony Brook invites qualified applicants for the position of professor and chair of neurology at SUNY Stony Brook. Senior, Board-certified neurologist with extensive experience in academic neurology. Administrative experience at either the departmental or divisional level and a record of research achievement are required. The chair will be expected to direct the clinical, teaching, and research programs at the Health Sciences Center and to provide leadership in neurological medicine on Long Island. New York State medical license will be required. Applicants should submit curriculum vitae and complete bibliography to: **Fritz A. Henn, Ph.D., M.D., Chair, Neurology Search Committee, c/o Department of Psychiatry, HSC, T-10, Room 020, SUNY Stony Brook, Stony Brook, NY 11794-8101. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. Women and minorities are particularly urged to apply.**

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



## UNIVERSITY OF HAMBURG



The position of  
**University Professor (C4)**  
for Tropical Medicine  
of the Faculty of Medicine  
is available beginning  
January 1st, 1991  
(Reference No. 1236/4)

**Responsibilities:** The occupant of this position will also be Head of the newly established Division of Molecular Biology of the Bernhard Nocht Institute for Tropical Medicine, Department of Health, Hamburg. This Division conducts research in the field of medical microbiology (parasitology/bacteriology/virology).

There are thoughts to appoint two additional university professors (C4) for Tropical Medicine who also will be heads of two further divisions at the Bernhard Nocht Institute. In this case, from these three C4 professors, the Director of the Bernhard Nocht Institute will be selected for periods of 6 years.

**Teaching responsibilities:** Maximally 8 hours per week per semester; with corresponding reduction in case of patient care responsibilities.

**Conditions of Employment:** In accordance with § 15 of Hamburgisches Hochschulgesetz.

Applicants may be M.D.s or Ph.D.s with molecular biological background who are actively working in the fields of medical parasitology or medical microbiology.

The occupant of the chair must be capable of participating in and responsibly continuing with the on-going reorganization of the Bernhard Nocht Institute.

The University of Hamburg endeavors to increase the proportion of women among the scientific personnel and wishes to emphasize that qualified women are encouraged to apply.

**Applications,** including curriculum vitae, bibliography and list of teaching experiences, are requested to be submitted (with the above cited Reference No.) by December 31st 1990 to the President of the University of Hamburg, Verwaltung/Personalreferat -331.8-, Moorweidenstraße 18, D-2000 Hamburg, 13.

## DEAN OF THE MEDICAL SCHOOL UNIVERSITY OF WISCONSIN-MADISON

The Dean of the Medical School serves as chief academic and executive officer of the School with responsibility for staffing, budget, curriculum, student academic affairs, and space. The Medical School is housed almost entirely on the Madison campus and is comprised of approximately 650 faculty, 305 graduate students, 86 postdoctoral trainees, and 600 medical students. The School offers the M.D. degree and masters' and doctoral degrees in the fields of anatomy, history of medicine, medical genetics, medical microbiology, medical physics, neurophysiology, oncology, pathology, pharmacology, physiological chemistry, physiology, and radiobiology. House staff and postgraduate training in all of the medical specialties is available in conjunction with the University Hospital.

Major qualifications for this position are a successful record of academic achievement and administrative leadership in medical education; accomplishments that meet standards for a tenured appointment at the rank of full professor at UW-Madison; a commitment to maintain and expand medical, graduate, and postgraduate instruction, research, public service and outreach activities; and strong management skills.

The position is available July 1, 1991. Applications and nominations received by December 20, 1990 will be considered. Later applications and nominations may be considered. Submit applications and nominations to: Professor Henry C. Pitot, Chair, Search and Screen Committee, University of Wisconsin-Madison, 134 Bascom Hall, Madison, WI 53706. Telephone: (608) 262-3956.

*The University of Wisconsin is an Equal Opportunity, Affirmative Action Employer.*

# STAFF SCIENTISTS

## AT LAWRENCE BERKELEY LABORATORY

The Lawrence Berkeley Laboratory's Energy Analysis Program is seeking highly qualified scientists for career positions in four areas:

**Mechanical Engineer for Residential Appliance Group (C/5878):** Calculate energy use and manufacturing costs of various energy conserving design options. Experience in appliance manufacturing industry is preferred. Education or experience in the area of heat transfer and thermodynamics. Prefer PhD in mechanical engineering.

**Building Energy Analyst (C/5997):** Compile and analyze measured building energy performance data. Prefer PhD plus experience in buildings energy research. Creativity, initiative, and strong project management, supervisory, and communications skills required.

**Energy Economist (C/5891):** Concentration on industrialized countries with some focus on Soviet Bloc countries or major regions of the developing world. Requires fluency in at least one European language or Japanese or good reading knowledge of at least two European languages. Prefer PhD in economics, geography, or an interdisciplinary transportation or energy-related discipline.

**Energy & Environmental Analyst (C/6089):** Analysis of economic and environmental impacts of reductions in electricity sales at utility service area and national levels; energy demand and environmental forecasting; analysis of energy conservation supply curves. Prefer PhD in energy-related discipline.

To apply or receive detailed position descriptions, submit resume to: Lawrence Berkeley Laboratory, Employment Office, Bldg. 90/1042 (specify Job numbers above), 1 Cyclotron Rd., Berkeley, CA 94720. An Equal Opportunity Employer, M/F/H.



LAWRENCE  
BERKELEY  
LABORATORY

## EXECUTIVE DIRECTOR INTER—UNIVERSITY CONSORTIUM FOR POLITICAL AND SOCIAL RESEARCH

The Council of the Inter-university Consortium for Political and Social Research (ICPSR) and the University of Michigan's Center for Political Studies invite applications and nominations for the position of Executive Director of the ICPSR. Selection criteria will include: demonstrated capability for successful leadership and management of a complex social science organization; an interdisciplinary perspective in keeping with the diverse substantive and technical areas in which the ICPSR works; proven capacity to plan, prepare, and submit successful proposals to funding agencies in the public and private sectors; substantive and technical conversance with use, preparation, management, and distribution of computer-readable data for instruction and research in the social sciences; a Ph.D. or equivalent in a social science discipline or related area of inquiry; research and publications commensurate with appointment to research scientist and/or professor in a university department in the social sciences or related areas. The Executive Director will be appointed to the staff of the Center for Political Studies, if appropriate, as a research scientist, and will also be appointed, if appropriate, as a professor in a relevant department or school at The University of Michigan. The successful candidate should be prepared to assume the position on September 1, 1991. The salary will be commensurate with the appointee's qualifications. The University of Michigan is a non-discriminatory, affirmative action employer.

Applications and nominations should be submitted by 01 January 1991, with vita, resume, and names of references to:

Chair, ICPSR Search Committee  
Center for Political Studies  
Institute for Social Research, Room 4080  
The University of Michigan  
Ann Arbor, Michigan 48106-1248

## SMITHSONIAN TROPICAL RESEARCH INSTITUTE DEPUTY DIRECTOR

The Smithsonian Tropical Research Institute (STRI) invites applications and nominations for the position of Deputy Director. STRI, located on the Isthmus of Panama, is a bureau of the Smithsonian Institution. The Institute is devoted to basic research throughout the world's tropics and is responsible for custodianship of a biological reserve, the Barro Colorado Nature Monument, and for the operation of a number of other marine and terrestrial facilities on the Isthmus.

The Deputy Director reports to the Institute's Director and is responsible for assisting the Director with the development of policies and the management of the Institute. The Institute's principal responsibilities are to promote research and education in the fields of ecology, evolution, behavior, anthropology and paleontology.

Candidate should possess a Ph.D. in a field related to STRI's broad interests, and should have experience appropriate to the effective management of an international research mission. Knowledge of the Spanish language would be useful.

Applications should consist of a letter of interest, curriculum vitae, and names and telephone numbers of three references. Replies should be submitted to:

DR. IRA RUBINOFF, DIRECTOR  
SMITHSONIAN TROPICAL RESEARCH INSTITUTE  
APO MIAMI 34002-0011

The salary range for this position is \$59,216-\$85,470. In addition, allowances for housing and overseas living are paid. This search will remain open until filled.

*STRI is an Equal Opportunity Employer and appointments can be made without regard for nationality.*

The national research centre at Jülich is jointly financed by the Federal Republic of Germany and the Federal State of North Rhine-Westphalia with a staff of 4,500. There is a broad spectrum of basic research at the centre ranging from medicine and biotechnology to atmospheric chemistry and dynamical systems. The four major research priorities are environmental and materials sciences, information technology and energy research.

For our **THEORETICAL ECOLOGY GROUP** we are looking for an experienced

### ECOLOGIST

-Code 167/90-

Applications are invited from research scientists for the above post, which is at a senior research level, to work in the newly established Theoretical Ecology Group within the Forschungszentrum Jülich, which conducts research into all aspects of theoretical ecology, and collaborates closely with those other institutes at Jülich working on environmental science and nonlinear dynamics.

We invite applicants from all areas of ecology, but some preference may be given to those candidates with theoretical and modelling interests or those who will interact closely with theory. It is expected that applicants would be equivalent to an associate professors in the USA or a reader/lecturer in Europe, although candidates with more seniority will also be considered. Salary will be commensurate with experience. Initially the appointment will be for two years, after which there will be the possibility of permanent employment.

The Forschungszentrum Jülich provides excellent research resources and facilities including computing and experimental facilities, travel and conference funds, and its own financial support for research grants, postdoctoral fellows and research students. Applicants are encouraged to contact Professor J. McGlade, on 49-2461-612305/8 or Fax 49-2461-612470 for informal enquiries about the post.

Closing date: November 30, 1990.

Please address your application with C.V., a list of publications and the names and addresses of three referees to

**Forschungszentrum Jülich GmbH**

PVA-PE, P.O. Box 1913, 5170 Jülich

Fed. Rep. Germany



### SIMON FRASER UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES

The Department is seeking to fill a new faculty position in

### EVOLUTIONARY BIOLOGY

The successful candidate must have demonstrated significant research capability in any area of evolutionary biology, and have strong interests in evolutionary theory. Participation in the graduate and undergraduate teaching programs is required.

This is a tenure-track position at the Assistant Professor level. Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to qualified applicants. While all eligible scientists are encouraged to apply, preference is given to citizens and permanent residents of Canada.

**By January 15, 1991** applicants should submit a curriculum vitae, statement of research interests, up to five representative reprints, and have three letters of reference sent to:

Dr. B. A. McKeown, Chair  
Department of Biological Sciences  
Simon Fraser University  
Burnaby, B.C. Canada  
V5A 1S6

## Senior Research Scientist

... to establish a Drug Discovery Laboratory  
using isolated tissue techniques.

This opportunity in our General Pharmacology Department requires a PhD in Pharmacology and at least 5 years of training and/or experience in pharmacology or physiology demonstrating scientific initiative, and an in-depth knowledge of isolated tissue techniques.

The successful candidate must have excellent oral and written communication skills and interface effectively with other investigators supporting increased drug discovery efforts and the development of new therapeutics for the treatment of cardiovascular disorders. Experience in whole animal pharmacological techniques is desired.

You'll be joining a group of talented men and women in a dynamic, expanding drug research organization backed by the resources of Johnson & Johnson, the world's leading health care products manufacturer. We offer a competitive salary and comprehensive benefits including health/dental insurance, 401(k) plan, our LIVE FOR LIFE Wellness Program with on-site fitness center, and a smoke-free workplace at our 172-acre, campus-like setting in suburban Philadelphia.

Please send resume with salary history and requirements to: J. Richardson, R.W. Johnson Pharmaceutical Research Institute, Welsh & McKean Roads, Spring House, PA 19477. An Equal Opportunity Employer



R.W. JOHNSON

PHARMACEUTICAL RESEARCH INSTITUTE

a Johnson & Johnson company

### Director, Work Environment Research Centre

The Ontario Workers' Compensation Institute Inc. invites applications from senior scientists in the field of population epidemiology and other relevant disciplines, with specific responsibility to create and direct a Work Environment Research Centre. This unit will develop and implement a program of research in the field of population health. It will investigate determinants of successful rehabilitation following injury and continuing disability as related to the work environment. Research areas will include both psychosocial and physical aspects of work. Applicants will have extensive, preferably international, experience in this area, and in the management of large-scale information systems, and in the use of such resources in the design and execution of research studies. Experience in the dissemination of scientific information to labour market parties and government agencies would also be of value. The primary appointment will be within the Ontario Workers' Compensation Institute, but suitable university affiliations will be arranged.

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

Apply with full career details and selected reprints to:

Dr. Hugh Smythe, President  
Ontario Workers' Compensation Institute Inc.  
2 Bloor Street West, Suite 1802  
Toronto, Ontario  
M4W 3E2  
Canada





## UNIVERSITY OF VIRGINIA

The Markey Center  
for Research on Cellular Signaling Processes

### Faculty Positions in:

- Structure of Cell Membranes and Receptors
- Signal Transmission and Processing, including second messengers
- Signal-initiated Regulation of Gene Expression
- Pertinent Macromolecular Structures

Research in these areas is supported by university-wide, multidisciplinary programs of the Molecular Biology Institute, the Biodynamics Institute, and the university's newly-organized and funded Markey Center. Several new positions will be filled in each of the coming three years. Emphasis is upon assistant Professorships, but senior appointments are also planned.

Applications and nominations from qualified scientists are cordially invited. Applicants should provide a full academic and research résumé and the names and addresses of three referees. Please write to:

Markey Center Search Committees  
Center for Advanced Studies  
University of Virginia  
Charlottesville, VA 22903-3196

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

## THE NATIONAL RESEARCH COUNCIL ANNOUNCES A PROGRAM OF

# RESIDENT RESEARCH ASSOCIATESHIPS

at the EPA Environmental Research Laboratory • Corvallis, Oregon

The National Research Council is accepting applications for three competitions in 1991 for Postdoctoral and Senior Research Associateship awards at the Environmental Protection Agency's Environmental Research Laboratory in Corvallis, Oregon (CERL). Research opportunities include:

### Rhizosphere Biology:

- molecular and ecological approaches to understanding the complex roles in soil of microbes present in the rhizosphere;
- use of microbial consortia to enhance activities in soil ecosystems;

### Transgenic Plants:

- development of conventional and novel molecular methods to study the fate in soil of gene products produced in plants.

Award recipients will be free to work in one of the above project areas as guest investigators at CERL. Annual stipend for recent Ph.D. recipients is \$27,150 and is appropriately higher for senior researchers. Duration of an award is one year renewable to a maximum of three. Support is available for relocation and limited professional travel and a comprehensive health insurance program is offered.

For further information contact:

Dr. Ramon J. Seidler

EPA/Environmental Research Laboratory

200 S.W. 35th Street • Corvallis, OR 97333 • Tel: (503) 757-4708

For application materials contact: Associateship Programs (GR 430/CS)



## NATIONAL RESEARCH COUNCIL

2101 Constitution Avenue

Washington, D.C. 20418

FAX: (202) 334-2759

Deadlines for application are January 15, April 15, and August 15.

IUCN—The World Conservation Union—is seeking a candidate to fill the post of:

### PROGRAMME OFFICER, SPECIES CONSERVATION

The candidate will be required to work in close collaboration with its Species Survival Commission network of experts, and tasks will include:

- Work with Species Survival Commission Specialist Groups to prepare, publish, and implement conservation Action Plans.
- Collaborate with other IUCN programmes to ensure the incorporation of species conservation into broadly-based conservation initiatives.
- Development of project proposals for species conservation activities, and supervision of the implementation of field projects.

The successful candidate should possess:

- An advanced degree in biological sciences and significant practical field experience in wildlife conservation, preferably in a developing country.
- A good understanding of biological diversity conservation, preferably with an emphasis on invertebrates and lower vertebrates.
- An ability to work cooperatively with others, both in an office situation and with members of the voluntary network.
- A very good command of the English language, both written and spoken, and preferably a good command of French and/or Spanish.
- Editing experience for scientific publications.
- A willingness to travel widely and frequently on IUCN business.

The post will be based at the IUCN Secretariat in Gland, Switzerland. Applicants should apply to: Personnel Officer, IUCN, Avenue du Mont-Blanc, CH-1196 Gland, Switzerland, before 15 December 1990. Applicants should send a curriculum vitae, a sample of their writing, and names of three referees.

## POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

- Applied Ocean Physics & Engineering
- Biology • Chemistry • Geology & Geophysics
- Physical Oceanography

Applications are invited from new or recent doctorates in science or engineering with interests in physical oceanography, meteorology, marine chemistry, marine geology and geophysics, biological oceanography, or applied ocean physics and engineering. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

### • Marine Policy and Ocean Management

Research fellowships are offered to individuals in the social sciences, or natural sciences to apply their training to the economic, legal and political issues that arise from uses of the world's oceans. Emphasis is placed on the economics of ocean space and on the role of science in governmental and industrial ocean policy. Topics of special current interest include marine biological diversity, the quality of marine habitats and marine reserves, and the impacts of sea-level change, the industrial organization of advanced marine technologies, management of historic shipwrecks, and Arctic affairs. Other research interests also may be appropriate.

Fellowships are rewarded for one year with a stipend of \$32,500 plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by January 15, 1991 for 1991-92 awards. Awards will be announced in March. Write for application forms to:

Dean of Graduate Studies  
P.O. Box 5

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affirmative  
action employer

**WOODS HOLE  
OCEANOGRAPHIC  
INSTITUTION**

Woods Hole, MA 02543



## POSITIONS OPEN

### CHAIRPERSON DEPARTMENT OF ANATOMY AND CELL BIOLOGY

Nominations and applications are invited for the position of professor and chairperson of the Department of Anatomy and Cell Biology at the East Carolina University School of Medicine. The department consists of 14 full-time faculty and is responsible for the education of medical, allied health, and graduate students. The primary research interests are in endocrine physiology/cell biology, and the neurosciences. The department is well funded and well equipped. We are seeking candidates with an outstanding record of research achievement, proven administrative and leadership skills, and a history of achievement, proven administrative and leadership skills, and a history of quality teaching in any of the anatomical disciplines. Candidates should have a doctorate in anatomy or a related discipline, experience in an academic medical center, and a record of scientific excellence. Salary and benefits are nationally competitive. Candidates should submit curriculum vitae and the names and addresses of three references to:

**Dr. Paul V. Phibbs, Chairman**  
Anatomy and Cell Biology Search Committee  
Department of Microbiology and Immunology  
East Carolina University School of Medicine  
Greenville, NC 27848-4354

Screening for this position will begin on 1 January 1991. *An Equal Opportunity/Affirmative Action University. Federal Law requires proper documentation of identity and employability at the time of employment. It is requested that this documentation be included with your application.*

**CHAIRPERSON** of the Department of Environmental Sciences/**ASSOCIATE DIRECTOR, ENVIRONMENTAL PROGRAMS** of New Jersey Agricultural Experiment Station (NJAES), Cook College, Rutgers, The State University of New Jersey, New Brunswick, New Jersey.

The Environmental Sciences Department has a multidisciplinary teaching, research, and extension mission focused on the challenges to the environment. The 26-faculty member program offers B.S., M.S., and Ph.D. degrees with specialties that include water and wastewater treatment, air pollution and industrial hygiene, soil science, fate and transport of contaminants in ecosystems, exposure assessment, and radiation.

Responsibilities: The appointee will provide leadership to achieve excellence in teaching, research, and public service by recruiting and developing an expanding faculty, facilitating multidisciplinary and multidisciplinary team research, and identifying and attracting external program funding. As associate director, the appointee will be responsible for programmatic leadership of all NJAES environmental programs. The associate director is involved in program planning, attracting external funding, and coordinating the NJAES program with state and federal programs. A major responsibility is the development of multidisciplinary teams to study environmental problems. Serves as a member of NJAES director's executive staff.

Qualifications: The appointee will have a Ph.D. in a field aligned with departmental programs and a distinguished record of grantsmanship, teaching, and internationally recognized research. Successful prior administrative experience in an academic setting is highly desirable.

Send résumé to: **Search Committee for Chairperson, Environmental Sciences Department, P.O. Box 231, Cook College, Rutgers, The State University, New Brunswick, NJ 08903.**

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

### DIRECTOR PHYSIOLOGY

The Johns Hopkins University School of Medicine is seeking a scientist to lead the Department of Physiology. Applicants should have demonstrated leadership qualities and outstanding abilities in research and teaching.

Please send letter of application, curriculum vitae, and bibliography to:

**John D. Stobo, M.D., Chairman**  
Physiology Search Committee  
Johns Hopkins University School of Medicine and  
The Johns Hopkins Hospital  
1830 East Monument Street, Room 9026  
Baltimore, MD 21205

*An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### BUCY CHAIR IN PHYSICS TEXAS TECH UNIVERSITY

Applications and nominations are invited for a new chair in physics (experimental particle physics) endowed by J. Fred Bucky and Odeta Greer Bucky. The appointment will be at the rank of professor with tenure in the Department of Physics. Criteria for selection include distinguished research in experimental particle physics with an interest in Superconducting Super Collider collaboration and a commitment to physics teaching. The Department of Physics is developing a program in particle physics to augment the existing programs in atomic-molecular-optical physics, condensed matter, chemical physics, biophysics, nuclear physics, and pulsed power. The department has 17 regular faculty members and approximately 50 graduate students who are pursuing Ph.D. or M.S. degrees in physics or in applied physics. Applicants should submit a résumé, list of publications, and statement of research and teaching plans, as well as the names of five references to: **Walter L. Borst, Chairman, Department of Physics, Texas Tech University, Lubbock, TX 79409-1051.** The deadline for receipt of application materials is 1 March 1991. *Texas Tech University is an Equal Opportunity/Affirmative Action Employer.*

### BIOLOGICAL SCIENCE DEPARTMENT

**CHAIR.** A chairperson is sought to head the Department of Biological Sciences at the University of Arkansas, Fayetteville. This new department, formed from the previous academic units of biology, botany, microbiology, and zoology, has 28 faculty, 75 M.S. and Ph.D. students, and 400 undergraduate majors. The University of Arkansas, Fayetteville, is the land-grant institution for Arkansas and has the only biology Ph.D. programs (botany, microbiology, and zoology) in the state. Qualities of the successful candidate will include experience in administration and leadership, a record of excellence in teaching, and an established record of research. Applicants from all areas of biology will be considered, but an appreciation of the breadth of biology is necessary. Applications should be sent to: **Collis Geren, Department of Biological Sciences, 632 SCEN Building, University of Arkansas, Fayetteville, AR 72701.** Candidates should arrange to have three letters of reference sent directly to Geren. Review of completed applications will begin 1 January 1991 and continue until the position is filled. Rank, salary, and other support will be commensurate with qualifications and experience. The position may be filled as soon as 1 July 1991. *Applications from women and minorities are encouraged. Applicants must furnish proof of legal authority to work in the United States. The University of Arkansas is an Equal Opportunity/Affirmative Action Employer.*

**DEAN, SCHOOL OF PHARMACY.** The University of Wisconsin-Madison invites applications and nominations for the position of Dean of the School of Pharmacy. Candidates must have a successful record of academic achievement and leadership in pharmacy education, accomplishments that meet standards for a tenured appointment at the rank of full professor at UW-Madison, and a commitment to maintain and expand pharmacy graduate and postgraduate instruction research, public service, and outreach activities. An undergraduate degree in pharmacy is desirable. The position is available 1 August 1991. All applications and nominations received by 15 January 1991 will be considered. Later applications and nominations may be considered. For information, contact: **Professor George Zograf, Chair, Search and Screen Committee, University of Wisconsin-Madison, 134 Bascom Hall, 500 Lincoln Drive, Madison, WI 53706. Telephone: 608-262-3956.** *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

**FACULTY POSITION IN GERIATRIC MEDICINE.** Case Western Reserve University School of Medicine. An **ASSISTANT PROFESSOR** faculty in the Division of Geriatric Medicine, Department of Medicine, is being offered at University Hospitals of Cleveland and the Cleveland VA Medical Center. Opportunities for research program development are focused in musculoskeletal metabolism and endocrinology of aging. CAQ in geriatric medicine preferred. Competitive salary with outstanding fringe benefits. Send curriculum vitae and references to: **Jerome Kowal, M.D., Director, Geriatric CARE Center, 12200 Fairhill Road, Cleveland, OH 44120. Telephone: 216-844-7246.** *The University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### DEAN

Louisiana State University (LSU) Medical Center is seeking applicants for the position of Dean of the School of Medicine in Shreveport. The dean is the chief administrative officer and is responsible for the educational, research, and clinical programs conducted at LSU Hospital. The school enrolls 400 medical students, 210 house officers, 80 graduate students and conducts continuing medical education programs.

LSU is the major state institution of higher learning with eight campuses and 52,840 students. LSUMC is committed to excellence in research and construction will begin soon on a \$35-million Biomedical Research Institute sponsored by the Biomedical Research Foundation of northwestern Louisiana. The medical center was recently designated as a Center of Excellence for Arthritis and Rheumatology.

Applicants should have a M.D. or Ph.D. degree and considerable academic administrative experience. Applications should include curriculum vitae, the names of three references, and should be submitted to: **Ronald B. George, M.D., Chairman, Dean Search Committee, LSU School of Medicine in Shreveport, P.O. Box 33932, Shreveport, LA 71130.**

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

### DIRECTOR OF ANIMAL CARE FACILITIES.

Immediate opening for experienced director of AAAA-LAC-accredited animal care facilities at the National Jewish Center for Immunology and Respiratory Medicine. Duties include managing modern facility of over 22,000 square feet on day-to-day and long-range basis. Experienced supervisor and personnel are already in place. Successful applicant might possess D.V.M., or Ph.D. degrees or have relevant experience. Applicant will be expected to develop a large virus-free mouse facility (10,000 to 15,000 census) and so should have extensive murine/rodent experience. Send current curriculum vitae/resumé, and names, addresses, and telephone numbers of at least four references to: **Charles G. Irvin, Ph.D., Chair, Search Committee, Pulmonary Physiology Department, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206.** References will not be contacted unless applicant makes short list. *Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR BIOMEDICAL ENGINEERING

The Johns Hopkins University School of Medicine and the Johns Hopkins Hospital are seeking a scientist to lead the Department of Biomedical Engineering. Applicants should have demonstrated leadership qualities and outstanding abilities in research and teaching in the application of engineering to problems of medical science.

Please send letter of application, curriculum vitae, and bibliography to:

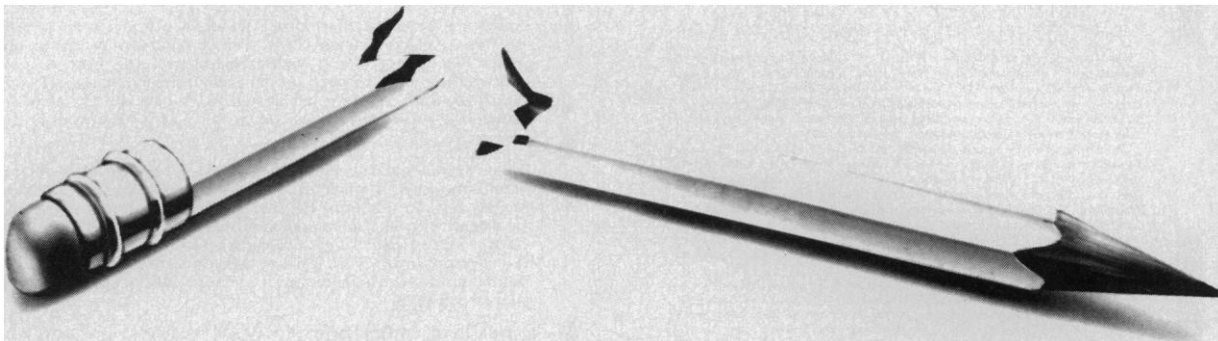
**William R. Brody, M.D., Ph.D., Chairman**  
Biomedical Engineering Search Committee  
Johns Hopkins Hospital  
Department of Radiology  
B1-119 Tower Radiology  
600 North Wolfe Street  
Baltimore, MD 21205

*An Affirmative Action/Equal Opportunity Employer.*

### STUDY DIRECTOR DRUG USE IN THE WORKPLACE

The National Research Council (NRC) is seeking a study director to support the activities of a committee considering issues surrounding scientific research on "Drug Use in the Workplace." The committee is forming within the NRC's Commission on Behavioral and Social Sciences and Education in coordination with the NRC's Institute of Medicine. Responsibilities include planning and supporting the committee's meetings, writing and dissemination of publication quality reports, and coordination with staff of the NRC and federal agencies. Requires Ph.D. or equivalent in behavioral or social sciences, at least 4 years of pertinent experience in research, and demonstrated ability to analyze and communicate technical material to a national audience. Please send résumé and cover letter in confidence to: **NRC/CBASSE, HA 160 (JT), 2101 Constitution Avenue, Washington, DC 20418.** *Affirmative Action/Equal Opportunity Employer.*





# You may have just written your last grant proposal.

For you, the opportunity to do important original research has always been more than a profession, it has been a passion.

But the past few years have not been the same. More and more of your time is spent writing and then rewriting grant requests. Funding is much tighter too, and state-of-the-art equipment never quite makes it to your laboratory.

Although you're ready for a change, you have no desire to be one of a thousand scientists lost among the layers of authority in a large pharmaceutical organization. The environment you're looking for is very different.

We invite you to consider Immunobiology Research Institute. The atmosphere is electric, the people and their science extraordinary.

Led by the world renowned immunologist Dr. Gideon Goldstein, and fully supported by the resources of Johnson & Johnson, IRI is dedicated to carrying out basic research of peptide drugs in the exploration of new, exciting

and non-toxic ways of moderating the immune system.

Ours is an atmosphere which fosters discovery and offers you many of the best features of a world-class academic environment. A place where a small, dedicated team of brilliant scientists works closely in a serene campus setting; a place where the freedom to explore new ideas and the interchange of knowledge among peers is nurtured.

As a new and growing organization, we are seeking PhD and MD candidates for exciting opportunities in the areas of allergy, oncology, immunology, neurobiology, cell biology, molecular biology, clinical research and scientific writing. For additional information, please send your C.V., in strict confidence, to: Director, Human Resources, Dept. 1116S, Immunobiology Research Institute, Route 22 East, P.O. Box 999, Annandale, New Jersey 08801-0999. An Equal Opportunity Employer.



**Immunobiology Research Institute**

A *Johnson & Johnson* Company

Leadership Beyond Compliance

DIRECTOR  
MESOSCALE AND MICROSCALE  
METEOROLOGY DIVISION NATIONAL  
CENTER FOR ATMOSPHERIC RESEARCH

The National Center for Atmospheric Research (NCAR) invites nominations and applications for the position of Director of the Mesoscale and Microscale Meteorology Division (MMM), a division of NCAR. Research within the MMM Division is concerned with mesoscale and microscale atmospheric phenomena that determine the behavior of weather systems on shorter time scales and which, in their aggregate, influence the behavior of the climate system on long time scales.

The Director of MMM ensures the scientific productivity, creativity, and excellence of the division; formulates and executes long- and short-range plans; oversees the operation and development of the division; and ensures that MMM actively contributes to interinstitutional, national and international programs on the fundamental questions of atmospheric research in mesoscale and microscale meteorology. The Director actively participates in MMM research efforts. As a member of the NCAR management team, he/she participates in NCAR strategy, policy and administrative matters, and will supervise in ways consistent with NCAR policies and its equal employment opportunity and affirmative action programs.

REQUIRES: Ph.D. in an area related to MMM research or the equivalent combination of education and experience; international recognition as a scientific leader in areas of MMM interest, as demonstrated by a research record of depth and breadth sufficient for providing long-term scientific leadership for the division; demonstrated understanding of effective direction of a complex research organization; ability to plan, develop, and utilize resources; skill in interacting with peers, both internal and external; and skill in directing, developing and evaluating staff.

We request that letters of application or nomination be sent by January 31, 1991. The salary range is \$5,948 - \$8,920 per month. Applications or equivalent expressions of interest should be accompanied by a resume and publications list. Please send letters to: Robert Serafin, Director, National Center for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307.

NCAR is operated by the 58-institution University Corporation for Atmospheric Research (UCAR), under the sponsorship of the National Science Foundation, and is firmly committed to ethnic and cultural diversity and encourages applicants of diverse backgrounds to apply.



National Center for  
Atmospheric Research

## MOLECULAR BIOLOGIST

SmithKline Beecham, a worldwide leader in pharmaceutical research, is seeking a postdoctoral scientist with a background in molecular biology and protein engineering to join our Pharmacology department. As part of a collaborative project between the departments of Pharmacology and Gene Expression Sciences, the scientist will investigate the effects of specific changes in protein structure on enzyme activity and drug-protein interactions.

The successful candidate will conduct structure/function analyses of human recombinant cyclic nucleotide phosphodiesterases by site-directed mutagenesis. In addition, he/she will integrate molecular biological techniques with enzymological approaches to define critical structural domains for catalytic activity and drug interaction. The incumbent will also have the opportunity to gain recognition throughout the scientific community through publication of scientific results and participation in national meetings.

Qualified candidates must have a Ph.D. in Molecular Biology, Genetics, Biochemistry or related discipline with 0-3 years postdoctoral experience; experience with recombinant DNA technology; and the knowledge of standard techniques in protein biochemistry and enzymology. The candidate should also have the desire to use molecular biology to examine drug-protein interactions and preferably a record of publications in major scientific journals.

Our state-of-the-art research facility is located in suburban Philadelphia near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package as well as the opportunity to learn in a scientifically intense environment, structured on creativity, teamwork and commitment. Qualified candidates should send their C.V. along with three references to: Nancy Hasson, Employment Administrator, H0160, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



**SmithKline Beecham**  
Pharmaceuticals

## MAMMALIAN CELL MOLECULAR GENETICIST

The newly reorganized **Department of Microbiology and Molecular Genetics** and **The Markey Center for Molecular Genetics** at the University of Vermont is continuing to expand its research base in molecular biology. A tenure track position at the assistant professor level is available in the area of molecular genetics related to mammalian cells and viruses. Areas of interest include, but are not limited to, (1) molecular virology, (2) fundamental mechanisms of DNA replication, recombination, gene expression, or protein synthesis, and (3) mechanisms of cell growth and differentiation. The candidate should be trained in genetics and molecular biology, and utilize modern approaches to problems of eukaryotic cell biology at the molecular level. A Ph.D. and postdoctoral experience are required. The expanded Department will occupy four floors in a new Microbiology Center. Start-up funds and interim renovated space are available. Faculty members hold appointments in both the College of Agriculture and Life Sciences and the College of Medicine. The primary emphasis is on research; teaching responsibilities are to undergraduate, graduate and medical students. Research interests center on basic problems in molecular genetics with several groups focusing on cell and molecular biology of mammalian cells.

Send nominations and applications with curriculum vitae, present and future research plans and at least three letters of reference to:

**Search Committee**  
**Department of Microbiology and Molecular Genetics**  
**Given Building**  
**University of Vermont**  
**Burlington, VT 05405**

Review of applications will begin immediately and continue until the position is filled. Women and minorities are encouraged to apply. The University of Vermont is an Equal Opportunity/Affirmative Action Employer.



**We're looking for someone  
to discover the future.**

## **Manager, Technical Assessment & Acquisitions**

**Campbell Soup Company** currently has a unique opportunity for a talented food sciences professional with the foresight to imagine the future and the scientific expertise to make it happen. If you have a PhD in an applicable scientific discipline and strong industrial experience, and you're ready for a career opportunity, this is the place for you.

In this management position, you will be responsible for identifying development opportunities and gathering new information for Campbell's R&D department. You will identify and gain access to information, technology and products that will cost-effectively improve the quality of Campbell's 3,000 item product line, and lead to new commercial/technical opportunities. You'll attend scientific meetings, make on-site visits, provide input/evaluations and manage the review and acquisition of technical opportunities. About 25% travel — some international — is involved.

In addition to your educational and professional background, a knowledge of food science/product development, enzymes, flavors, lipids, and carbohydrates would be a strong plus. Because your work influences the activities of several internal departments, external consultants and technical experts, leadership, communication and interpersonal skills are vital to your success.

Be part of the driving force that has made Campbell's a \$6 billion player in the food industry and will make us the industry leader. In return, we can offer you an excellent total compensation package, and the kind of visibility that offers opportunities for growth. For more information and immediate consideration, please send your resume, with salary requirements, to: **Director of Staffing, Campbell Soup Company, Campbell Place, Box 35D, Camden, NJ 08103-1799.** Equal Opportunity Employer.

**Campbell Soup Company**

## **TAKING IMAGINATION ONE STEP FURTHER.**

Life Technologies, Inc., is one of the most prominent names in life sciences research, industrial bioproducts and biotechnology. LTI supplies more than 2,000 products world-wide including GIBCO BRL Research Products. LTI is seeking qualified professionals for the following positions:

### **SCIENTIST — APPLICATIONS LAB**

Work on applications of products; give seminars to customers. Working knowledge of Molecular Biology/Cell Culture techniques.

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Ph.D. with knowledge of techniques mentioned above, with teaching/writing/review experience.

### **SCIENTIST BIOPROCESS DEVELOPMENT**

Responsible for evaluation of protein isolation procedures, development of new techniques and assay methods. Experience with purification and bioprocess scale-up.

LTI ALSO PROVIDES OPPORTUNITIES AT ALL LEVELS (BS, MS, Ph.D.) FOR THE FOLLOWING DISCIPLINE AREAS:

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MICROBIOLOGY**

**BIOCHEMISTRY  
ENZYMOLGY**

**CELL BIOLOGY  
IMMUNOLOGY**

LTI offers an excellent salary, opportunities for career advancement, and an impressive roster of benefits. Send your resume or CV, with salary requirements indicating position of interest to appropriate location below:

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P.O. Box 6009  
Gaithersburg, MD 20877  
Fax (301) 670-1394

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Location for BRL-molecular, cell  
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We hire and promote equally.*

**LIFE TECHNOLOGIES, INC.**



**NATIONAL CENTER FOR  
BIOTECHNOLOGY INFORMATION**



## **Scientific Visitors Program**

The National Center for Biotechnology Information (NCBI), National Library of Medicine (NIH), invites applications from postdoctoral investigators and faculty members for its Scientific Visitors Program. The program is designed to foster collaborations between NCBI's scientific staff and extramural scientists as well as to provide on-site training in computational biology. Reimbursement of travel costs including transportation, lodging, and per diem will be provided to periodic scientific visitors. Visitors on continuous assignment will be paid a stipend and a dislocation allowance and will be reimbursed for round-trip travel. Applicants for the program shall include a resume and description of research plans; applications will be peer-reviewed. This is an equal opportunity program open to all qualified persons without regard to race, sex, religion, age, color, handicap, or national origin. Administration of the Scientific Visitors Program is provided by Oak Ridge Associated Universities to whom requests for information and application forms should be directed:



**NCBI Scientific Visitors Program  
Oak Ridge Associated Universities  
P.O. Box 117  
Oak Ridge, Tennessee 37831-0117**

## **ANTIBODY ENGINEERING IN E. COLI**

### **THERAPEUTICS R & D POSTDOCTORAL SCIENTISTS (2)**

HYBRITECH INCORPORATED is a division of Fortune 100 Eli Lilly & Company and San Diego's largest biotechnology company. We are located in the heart of one of the nation's premier research centers and are involved in R & D of in-vitro diagnostic products, as well as in-vivo imaging products.

We are providing valuable training opportunities in an inter-disciplinary team involved with antibody engineering and mutagenesis using bacterial expression systems. We are pursuing novel methods to generate, screen and characterize unique antibodies to better understand antibody/antigen complexes of interest.

We seek a background in bacterial genetics and bacterial protein expression systems, coupled with solid foundation in molecular biology. Experience with immunogenetics and protein mutagenesis would be desirable.

HYBRITECH offers a challenging research environment, competitive salaries and benefits, including relocation assistance. For consideration, please send your C.V. to: **HYBRITECH INCORPORATED, Dept. HAUGH, 11095 Torreyana Road, San Diego, CA 92126.** An equal opportunity employer.

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## POSITIONS OPEN

**EDITOR, LIFE SCIENCES.** As a result of program expansions, a respected international publisher has available career opportunity for individual with graduate degree(s) in chemistry. Responsibilities will include the evaluation and acquisition of new manuscripts for scholarly books and journals in all areas of chemistry, development of new media, supervision of editorial preparation, and marketing activities for the sciences program. Experience in publishing or related field desirable. Position is New York City-based; travel approximately 50%. We offer a competitive salary and outstanding benefits package. Interested candidates should send résumé and cover letter, including salary history and requirements, to: **Personnel Director, Springer-Verlag New York, Inc., 175 Fifth Avenue, New York, NY 10010. Equal Opportunity Employer, M/F/H.**

**ENTOMOLOGY CURATOR.** Applications solicited for assistant or associate curator. Responsibilities consist of collections-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 Hymenoptera, Diptera, and Lepidoptera. Send curriculum vitae, description of research interests, collection management and public program experience, grant/contract funding, and names of three references by 1 February 1991 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.**

### FACULTY POSITION IMMUNOLOGY/MOLECULAR BIOLOGY ALBANY COLLEGE OF PHARMACY

Applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level are invited from candidates with a background in immunology, virology, microbiology, or molecular biology. Instruction responsibilities in immunology and related subject areas in the B.S. and Pharm.D. curricula. The successful candidate should have a Ph.D. and postdoctoral experience or its equivalent. A strong commitment to undergraduate education is imperative, along with supervision of undergraduate research.

Send letter of application along with curriculum vitae, the names and addresses of three references, and a statement of research interests and goals (by 1 January 1991) to:

**Professor William R. Stoll, Chair  
Department of Biological Sciences  
Albany College of Pharmacy  
106 New Scotland Avenue  
Albany, NY 12208-3492**

*Albany College of Pharmacy is an Equal Opportunity/Affirmative Action Employer.*

The Biology Department invites applications to fill two **FACULTY POSITIONS** as part of a new doctoral track in environmental biology in the Environmental Sciences Program: (i) A tenure-track position in ecology beginning fall 1991 at the **ASSISTANT/ASSOCIATE PROFESSOR** level. We seek a person who is conducting basic research on community or ecosystems ecology in either terrestrial or coastal marine systems. (ii) A temporary 1-year appointment (with a potential to be converted into a tenure-track position in fall 1992) at the **ASSISTANT PROFESSOR** level beginning fall 1991. We seek a person who is conducting basic research on evolutionary or population genetics of plants, animals, or microorganisms using molecular approaches. Preference will be given to applicants who also have interests in environmental issues, particularly conservation and biodiversity. Successful candidates will be expected to develop a strong research program and participate in graduate and undergraduate teaching. Ph.D. required, postdoctoral experience preferred. Salary will be commensurate with qualifications and experience. Submit curriculum vitae, a statement of research goals, and three letters of recommendation to: **Search Committee, Department of Biology, University of Massachusetts at Boston, Harbor Campus, Boston, MA 02125-3393.** Applications received by 15 December 1990 will be given priority consideration. *The University of Massachusetts at Boston is an Affirmative Action/Equal Opportunity/Title IX Employer.*

## POSITIONS OPEN

Agnes Scott College, Department of Chemistry, invites applications for a **TENURE-TRACK POSITION** beginning fall 1991 in the area of organic or bioorganic chemistry. Teaching responsibilities would include organic chemistry and biochemistry. Applicants are expected to have a doctorate, a demonstrated potential for excellence in teaching, and a commitment to research involving students in an undergraduate institution. Rank and salary negotiable. Recently renovated building with excellent facilities. Broad complement of modern instrumentation. ACS-approved since 1957. Degrees in chemistry and chemistry with biochemistry emphasis. Private, liberal arts college for women. Résumé, a brief discussion of research plans, undergraduate and graduate transcripts, and three letters of recommendation should be sent to: **T. Leon Venable, Chair, Department of Chemistry, Agnes Scott College, Decatur, GA 30030.** Evaluation of applicants will begin in January 1991. *An Equal Opportunity Employer. Applications from women and minorities are especially encouraged.*

**BEHAVIORAL OR POPULATION ECOLOGIST.** Applications are invited for a tenure-track **FACULTY POSITION** in the Department of Zoology at The Ohio State University. We are seeking applicants with high promise in research and teaching who work on evolutionary aspects of behavioral ecology or population biology. Preference will be given to applicants with a strong theoretical and quantitative background who conduct field experiments and will attract outstanding graduate students. In addition to maintaining a vigorous, extramurally funded research program, the successful candidate will be expected to teach at the undergraduate and graduate levels. We expect to fill the vacancy with an assistant professor, but exceptional candidates will be considered for appointment at a higher level. The appointment will begin in autumn of 1991. Initial application materials, including curriculum vitae, brief description of research and teaching goals, one research paper or manuscript, and the names, addresses, and telephone numbers of three references, should be submitted by 15 January 1991 to: **Search Committee, Department of Zoology, The Ohio State University, Columbus, OH 43210-1293.** *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly encouraged to apply.*

### MICROSCOPIST

The Department of Anatomy and Cell Biology, Faculty of Medicine, University of Alberta, is seeking a senior microscopist to direct a core facility in microscopy. The facility will provide microscopy services on a collaborative basis to researchers within the Faculty of Medicine. Technical support staff will be provided. Applicants should be experienced in transmission and scanning electron microscopy, immunogold methods, immunocytochemistry, and rotary-shadowing. Training will be provided in image analysis methods. Starting date: 1 July 1991. Salary range: \$35,000 to \$45,000, depending on qualifications. Applicants should submit curriculum vitae and the names of three references to: **Dr. Richard A. Murphy, Professor and Chairman, Anatomy and Cell Biology, Faculty of Medicine, University of Alberta, Edmonton, Alberta, Canada T6G 2H7.** Deadline for receipt of applications is 28 February 1991.

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

**ASSISTANT SPECIALIST I** (university setting). Position available to do research in O<sub>2</sub>-activation in enzymatic reactions. The successful candidate will be expected to install a special vacuum apparatus to conduct O-18 isotope effect measurements on O<sub>2</sub>-utilizing enzymes and to construct site-specific mutants of targeted enzymes for structural and functional analysis. The candidate should have a Ph.D. in biochemistry with at least 1 year of postdoctoral experience in kinetic enzymology and mechanistic redox chemistry. Expertise in site-directed mutagenetic methods, protein purification, and high vacuum methodology is desirable. Annual salary starts from \$29,800. Send this ad, your résumé, and three letters of reference to: **Job #CP19519, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 10 December 1990. Job site and interview: Berkeley, California. *An Equal Opportunity Employer.*

## POSITIONS OPEN

**MICROBIOLOGY FACULTY POSITION.** St. Mary's College of Maryland invites applications for a faculty appointment in biology to start fall semester 1991. The appointee is expected to teach microbiology, electives in specialty, and share responsibilities for genetics and introductory courses in biology. Strong commitment to undergraduate teaching and involving undergraduate students in research are expected. Ph.D. required. Rank and salary dependent upon qualifications. St. Mary's College is a state-supported, liberal arts college with 1500 students. The college's campus is in historic St. Mary's City, located on a subestuary of the Chesapeake Bay, 70 miles southeast of Washington, D.C. Send curriculum vitae, statement of teaching/research interests, and three letters of reference by 15 January 1991 to: **Dr. Christopher E. Tanner, Chairman, Microbiology Search Committee, Division of Natural Science and Mathematics, St. Mary's College of Maryland, St. Mary's City, MD 20686.** *Women and minorities are urged to apply. Equal Opportunity/Affirmative Action Employer.*

**HUMAN BIOLOGIST.** Tenure track, at Ohio Dominican College. Ohio Dominican College is a small private Catholic coeducational college of liberal arts and sciences, with a strong core humanities program. The college has a long-standing commitment to international students and to adult learners in a weekend college. We are seeking a human biologist to begin in September of 1991. Teaching includes introductory courses in biology and advanced courses in human anatomy, physiology, and embryology. Ph.D. preferred. Rank negotiable. Salary competitive. Send letter of application, current curriculum vitae, and list of three references with telephone numbers by 15 January 1991 to: **Dr. Rebecca Rowth, Ohio Dominican College, 1216 Sunbury Road, Columbus, OH 43219.**

*Ohio Dominican College is an Equal Opportunity Employer.*

### MOLECULAR TECHNOLOGIST

The Molecular Genetics/Oncology Laboratory at The Children's Hospital, Denver, is seeking applicants for a medical technician position. The chief responsibility will be to perform molecular diagnostic tests for a variety of oncologic and genetic conditions. Case-related research opportunities will also be available. Minimum of B.A. or B.S. in biology or related field and previous training in DNA techniques is required. Experience in molecular genetic testing would be ideal. Computer expertise would be an additional asset. We offer a competitive salary, commensurate with experience. *The Children's Hospital is an Equal Opportunity Employer* and is affiliated with the University of Colorado Health Sciences Center. Send curriculum vitae to: **Annette Taylor, Ph.D., Assistant Director of Molecular Genetics, Department of Pathology, B120, The Children's Hospital, 1056 East 19th Avenue, Denver, CO 80218-1088.**

### UNIVERSITY OF MASSACHUSETTS AT BOSTON

The Environmental Sciences Program is seeking to fill two **FACULTY POSITIONS** (rank open), one in the area of marine organic chemistry or organic geochemistry and the other in the area of phytoplankton ecology/coastal, primary production, to become part of an interdisciplinary program working primarily in coastal/estuarine systems. Ph.D. required, postdoctoral experience preferred. Teaching and advising duties will be primarily at the graduate level. Excellent laboratory facilities and support personnel are available. In addition, appointment of a research associate in support of the organic geochemist's position may be possible. Candidates at the rank of associate or full professor must provide evidence of a strong independent research program and successful teaching and direction of graduate students, while candidates at the rank of assistant professor must demonstrate strong potential for same. The Environmental Sciences Program encompasses organic and inorganic geochemistry, benthic ecology, aquatic toxicology, microbial ecology, coastal and estuarine physics, marine policy, environmental economics, and environmental law. Send résumé, cover letter, and the names of at least three references to: **Chairperson, Search Committee, Environmental Sciences Program, University of Massachusetts at Boston, Harbor Campus, Boston, MA 02125-3393.**

*The University of Massachusetts is an Affirmative Action/Equal Opportunity/Title IX Employer. Applications received by 15 December 1990 will be given priority consideration.*



## Ph.D. Toxicologist

Wyeth-Ayerst Research has an immediate opening for a Ph.D. level Toxicologist to direct pre-clinical toxicology studies within the **Drug Safety Evaluation Division**. Postdoctoral experience is preferred, although entry level senior candidates with appropriate background will be considered. The position requires broad based technical expertise and skills in interpreting safety data as well as the ability to communicate results orally and in writing. The successful candidate will work on a cooperative basis with senior level personnel to define and characterize the toxicologic potential of a broad range of potential therapeutic agents.

The Wyeth-Ayerst Drug Safety Evaluation Division is located between the foot hills of the Adirondack Mountains and the shores of Lake Champlain. The area offers the benefits of a relaxed rural life style and a wide range of outdoor recreational activities while being within easy driving distance of such cultural centers as Lake Placid, Burlington, Vermont, and Montreal, Canada. Wyeth-Ayerst is an equal opportunity employer offering the successful candidate an attractive benefits package and a salary commensurate with experience. Please forward resume, with salary history/requirements to: **Mr. Gary Wagoner, Wyeth-Ayerst Laboratories, 64 Maple Street, Rouses Point, NY 12979.**



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## Baylor College of Medicine

### PRE- & POST-DOCTORAL RESEARCH TRAINING CELL AND MOLECULAR BIOLOGY OF AGING

Positions are available for predoctoral and postdoctoral trainees in the cell and molecular biology of aging at the **Baylor College of Medicine**. This interdisciplinary program offers traineeships in the laboratories of **Drs. Eugene Barnes, Gretchen Darlington, Ron Davis, Anthony Means, Robb Moses, Bert O'Malley, Olivia Pereira-Smith, Robert Schwartz, James Smith, and Warren Strittmatter**. Research emphasis is on the biochemical deficiencies and the molecular genetics of inherited diseases showing accelerated aging or neuronal cell death; alterations in DNA synthesis which occur in aging cells; the regulation of gene expression in normal and aged cells; the role of calcium in cell proliferation; receptor and ion channel alterations in aging; and the study of genes required for normal memory and those involved in the genetic program of mortality. Applicants must be United States citizens. Send a curriculum vitae and three reference letters to: **Dr. Ron Davis, Department of Cell Biology, Baylor College of Medicine, Houston, Texas 77030.** Baylor College of Medicine is an Equal Opportunity/Affirmative Action College.

## Molecular Biologist-Ph.D.

A position is available immediately for an individual with a Ph.D. or equivalent in Molecular Biology or a related discipline in the Department of Cancer Research at the research facilities in West Point, PA. The successful candidate will join a team of investigators involved in the characterization of molecular targets for the development of anti-cancer agents.

In addition to a Ph.D., the position requires 1-3 years postdoctoral experience with recombinant DNA and mammalian cell culture techniques such as molecular cloning, DNA sequencing, PCR and prokaryotic/eukaryotic gene expression. Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia.

Please send curriculum vitae to:

**Personnel Manager  
Ad# D-35  
Research Personnel, WP42-2  
Merck Sharp & Dohme  
Research Laboratories  
West Point, PA 19486**

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## Retrovirus Production

**Genetic Therapy, Inc.** is a leader in the field of gene transfer and gene therapy. In collaboration with researchers at the National Institutes of Health, GTI has been associated with the first clinical testing of gene transfer involving the use of retroviral vectors.

GTI is looking for an individual with expertise in large scale cell culture methods. Experience with bioreactors, retrovirus production, the production of secreted products from cultured cells, is a definite asset.

GTI offers an exciting and stimulating research environment as well as competitive compensation and benefit programs.

Qualifications should preferably include a PhD, but BS or MS qualified individuals with the appropriate experience are encouraged to apply.

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



**Genetic Therapy, Inc.  
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## Research Support Grants

Immunex Corporation, a leading biotechnology company, is pleased to announce the continuation of its Research Support Grant Program for studies in Immunology and related fields.

This year we are particularly interested in supporting research aimed at the characterization of novel cytokines involved in the control of immunity, inflammation and hematopoiesis.

Please send a brief (1-2 page) description of your on-going research activities, a description of similar length on the work you propose and a copy of your curriculum vitae to:

### OUTREACH PROGRAM

**Immunex Corporation  
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Equal Opportunity Employer

**DEADLINE FOR SUBMISSION:  
January 31, 1991**

**IMMUNEX**

## Research Scientists Drug Discovery

To capitalize on the latest developments in oncogenes, anti-oncogenes and gene transcription, **Oncogene Science, Inc.** is expanding its therapeutic programs focused on the development of novel pharmaceuticals.

Candidates should have 2-5 years' postdoctoral experience with a proven record of success in either molecular biology or protein biochemistry.

Founded in 1983, **Oncogene Science** is strategically located on the North Shore of Long Island. The Company offers excellent compensation and benefit packages. Qualified candidates should send their resumes, including a list of publications and references, to: **Dr. J.G. Foulkes, Director of Therapeutics, Oncogene Science, Inc., 350 Community Drive, Manhasset, NY 11030.**

An Equal Opportunity Employer M/F



# African Swine Fever Virus Research

## Plum Island Animal Disease Center

African swine fever (ASF) is an exotic disease which poses a threat to the swine industries of the Western Hemisphere. ASF virus is an icosahedral cytoplasmic DNA virus that shares important properties with the poxviruses. Control of ASF worldwide has been frustrated because: there is no effective vaccine; the virus persists in natural reservoirs in soft ticks and wild suidae; some clinical forms of the disease are difficult to recognize; inapparent carriers exist among pigs in enzootic areas; and the scientific basis to explain or address these and other important facets of disease pathogenesis is lacking.

The multidisciplinary ASF research group at the Center now plans to add a Lead Scientist and four Research Associate positions to an existing program that includes eight scientists investigating vaccine based and novel control strategies for this challenging disease problem. The program has exceptionally strong base funding; well equipped laboratories for research in immunology, virology and molecular biology; an SLA inbred swine herd; and the most extensive high-security animal biocontainment facilities in the world.

### MICROBIOLOGIST (GM 13/14)

As Lead Scientist the appointee will have broad research opportunities, ample start-up funds and will be able to recruit a research team. Personal research will be in the area of molecular virology or cellular immunology. Demonstrated research accomplishments in infectious diseases as well as knowledge of virology, biochemistry, molecular and cell biology and immunology are required. This is a permanent staff position and applicants must be U.S. citizens. Appointment and salary will be commensurate with experience.

### RESEARCH ASSOCIATES (GS 11/12)

Four Postdoctoral Research Associate positions are available. These positions offer an unusual and highly productive opportunity for those who would like to build their careers by tackling a significant and intellectually challenging international disease problem. Research Associate appointments are for two or three years from Jan. 1, 1991 (or by arrangement), and will be at the GS-11 or GS-12 level (approximate salaries will be \$31K and \$37K/year, respectively). Successful candidates must have obtained a PhD or equivalent degree in a relevant discipline. Individuals with experience in herpes or poxvirus systems are particularly encouraged to apply. Positions for virologists/immunologists/molecular and cell biologists are open in the following areas:

- ASFV gene expression and regulation;
- Characterization of ASF virus genes associated with viral virulence;
- Humoral and cellular protective immune mechanisms;
- Characterization of viral antigens responsible for protective immunity

The Center is situated off the northeast tip of Long Island, NY. USDA ferry services to Orient Point, NY and Old Saybrook, CT offer a choice of living on Long Island or in Connecticut. Collaborative arrangements with research institutions in the area, including the University of Connecticut and Tufts University open additional interesting research opportunities. Applicants should send a curriculum vitae along with the names and addresses of three references to:

D. L. Rock  
Research Leader, Microbiology  
USDA-ARS Plum Island Animal Disease Center  
P. O. Box 848, Greenport, NY 11944  
Telephone: 516/323-2500 x330  
Applications must be received by January 1, 1991

**ARS IS AN EQUAL OPPORTUNITY EMPLOYER  
WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY**



**Agricultural  
Research  
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**United States  
Department of  
Agriculture**

## POSITIONS OPEN

Indiana University School of Medicine is accepting applications for two tenure-track **FACULTY POSITIONS**, one in microanatomy and one in biochemistry, at the South Bend Center for Medical Education on the Campus of the University of Notre Dame, starting July 1991. Each appointee will be expected to develop an active, independent research program in his or her area of interest and also organize and teach a course in medical histology/embryology or medical biochemistry to 16 Indiana University freshman medical students. Rank and salary will be commensurate with experience. Applicants should send curriculum vitae, reprints of recent publications, statements of research and teaching goals, and the names of three references by 15 December 1990 to: **Dr. Thomas Troeger, Director, South Bend Center for Medical Education, Haggard Hall, University of Notre Dame, Notre Dame, IN 46556. Telephone: 219-239-5574. An Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** Available immediately to study developmentally regulated penicillin-binding proteins in *Bacillus subtilis*. Project combines molecular biology and microbial physiology. Send curriculum vitae and names of three references to: **Dr. C. Buchanan, Department of Biological Sciences, Southern Methodist University, Dallas, Texas 75275. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION.** Available immediately with the Agricultural Research Service, United States Department of Agriculture (ARS-USDA), for work on population biology of natural enemy introductions. This will involve modeling and experiments in the field and laboratory in Europe and the United States on biological control of *Diuraphis noxia*. Background in population ecology and population genetics required; experience in entomology desirable. Send curriculum vitae and names and addresses of three references to: **Dr. Keith R. Hopper, European Parasite Laboratory, ARS-USDA, 13-15 rue de la Masse, 78910 Orgerus-Behoust, France. Telephone: 33-1-3487-2075. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** Available to study the molecular biology of hormonal regulation of tissue-type plasminogen activator (tPA) and PA-inhibitor (PAI-1) gene expression in hepatocytes and hepatoma cells. Candidates must have experience in molecular biology. Send résumé, statement of research interests, and names of references to: **Dr. Thomas Gelehrter, Department of Human Genetics, 4708 MS II/Box 0618, University of Michigan Medical School, Ann Arbor, MI 48109-0618. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION.** At Oak Ridge National Laboratory (ORNL) available to develop (i) methods to use stable isotopes in DNA sequencing and (ii) an associated method, very high resolution gel electrophoresis. Background in physical or analytical chemistry preferred. For position information: **K. Bruce Jacobson of ORNL at: 615-574-1204; for application material: Postgraduate Research Program, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-3456.**

### POSTDOCTORAL POSITIONS AVAILABLE

Opportunity to join multidisciplinary program at the University of Rochester Medical Center.

• Position (i): Study the regulation and structure-function relationship of anion transport proteins. Experience in molecular or cellular biology or electrophysiology is preferred.

• Position (ii): Study regulation of O-glycosylation. Experience in structural characterization of glycoconjugates with opportunity to learn molecular biology, if desired.

• Position (iii): Study receptors and/or proteins involved in signal transduction pathways regulating exocrine cell secretion. Experience in molecular biology preferred.

Submit curriculum vitae and the names and addresses of three references to: **Dr. Lawrence A. Tabak, University of Rochester, School of Medicine and Dentistry, Department of Dental Research, Box 611, Rochester, NY 14642. Telephone: 716-275-3441.**

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



## POSITIONS OPEN

### POSTDOCTORAL POSITION IN CANCER RESEARCH AT MAYO CLINIC

Postdoctoral position available in the Division of Developmental Oncology Research at Mayo Clinic/ Foundation to study modulation of transmembrane signaling in human cancer. Superb state-of-the-art laboratory and institutional core facilities available to a Ph.D. or M.D./Ph.D. in molecular pharmacology and/or molecular biology. Send applications with curriculum vitae, bibliography, and names, addresses and telephone numbers of three references to: **John S. Kovach, M.D., Professor and Chairman, Department of Oncology, Director, Mayo Comprehensive Cancer Center, Mayo Clinic, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Employer.**

### HARVARD UNIVERSITY BRIGHAM AND WOMEN'S HOSPITAL

**POSTDOCTORAL RESEARCH.** Opportunity for recent Ph.D. to work in a multidisciplinary brain tumor laboratory. Experience in molecular biology with special interest in signal transduction by growth factors required. Position open immediately. Salary range: \$30,000 to \$33,000. Send complete curriculum vitae, a short statement of research interests, and letter of inquiry to:

**Dr. Peter M. Black**  
Division of Neurosurgery  
Brigham and Women's Hospital  
75 Francis Street  
Boston, MA 02115

**Ph.D. IN BIOCHEMISTRY.** Position in the Surgical Research Laboratory in the Department of Surgery of the Chicago Medical School at Mount Sinai Hospital Medical Center. Research development and application of molecular biology in the study of sepsis and septic shock. Molecular biological techniques required. Please send curriculum vitae to: **William Schumer, M.D., Chairman, Department of Surgery, The Chicago Medical School at Mount Sinai Hospital Medical Center, California Avenue at 15th Street, Chicago, IL 60608.**

**POSTDOCTORAL FELLOWSHIP.** Applicants sought for a fellowship to study the effects of extended performance on cognition and event-related potentials. *Required:* U.S. citizenship and Ph.D. in experimental psychology or a related field. Advantageous: knowledge of aviation, attention, memory, and sleep loss; programming in MS-DOS and UNIX environments. Contact: **Carl E. Williams, Naval Aerospace Medical Research Laboratory, Naval Air Station, Pensacola, FL 32508-5700. Telephone: 904-452-4457. Equal Opportunity Employer.**

**POSTDOCTORAL FELLOWSHIP.** In the area of vasopressin receptor biochemistry and physiology. Applicant must be M.D., Ph.D., or D.V.M. on commencement of appointment; must be a U.S. citizen or an immigrant to the United States. Support is through an NIH Training Grant. Send application to: **Dr. R. Kumar, Departments of Medicine, Biochemistry, and Molecular Biology, Room 911A, Guggenheim Building, Mayo Clinic and Foundation, Rochester, MN 55905.**

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**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE.** Research involves the use of enzymology and molecular biology to study opioid and related peptide metabolism. A Ph.D. in biochemistry, biology, or related fields preferred. Stipend commensurate with experience. Send curriculum vitae and names of references to: **Dr. Louis B. Hersh, Biochemistry Department, University of Texas Southwestern Medical School, 5323 Harry Hines Boulevard, Dallas, TX 75235-9038. An Equal Opportunity University.**

**POSTDOCTORAL RESEARCH ASSOCIATES.** Positions are available immediately for research on the biology and biochemistry of FGF, other related growth factors, and their receptors. The research includes protein purification, cDNA cloning, transfection, and expression. Candidates with a Ph.D. and/or M.D. and with experience in molecular biology and/or protein chemistry are invited to apply. Please send résumé and the names of two references to: **Dr. Michael Klagsbrun, Children's/Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115. Telephone: 617-735-7503.**

*The Children's Hospital is an Equal Opportunity Employer.*

## POSITIONS OPEN

### POSTDOCTORAL POSITION

Position available immediately for cell biologist to direct neuronal proliferation project. Objective is to proliferate nontransfected normal human embryonic dopaminergic neurons in vitro using aggregate tissue culture techniques. The goal is to obtain a cell line usable for clinical transplantation for patients with Parkinson's disease. Candidate would assume complete responsibility for established project. Background in neuronal tissue culture techniques desirable. Send curriculum vitae and three letters of recommendation to:

**Thomas B. Freeman, M.D.**  
Assistant Professor  
Division of Neurosurgery  
Department of Pharmacology  
University of South Florida  
#4 Columbia Drive, Suite 730  
Tampa, FL 33606

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS

Gladstone Foundation Laboratories, University of California, San Francisco. Studies involve cellular and molecular biology of lipoprotein metabolism and atherosclerosis. Positions available in: protein biochemistry (correlation of functional properties of plasma apolipoprotein E with its crystal structure; major focus on lipid-protein interactions), cell biology (regulation of platelet function by action-membrane interactions, use transgenic animals and morphology), and neurobiology (study regeneration in central and peripheral nervous system using in vivo and in vitro models). Positions in laboratories of Drs. Karl Weisgraber, Joan Fox, and Robert Pitas. Send curriculum vitae to: **K. W. Weisgraber, Ph.D., Associate Director of Administration, Gladstone Foundation Laboratories, University of California, San Francisco, P.O. Box 40608, San Francisco, CA 94140-0608.**

# SCIENTIFIC OPPORTUNITIES

## HELPING OTHERS LIVE A BETTER LIFE

*Boehringer Mannheim Corporation, a rapidly growing leader in the field of Medical Diagnostics, Biochemicals and Medical Research, is excited to be supporting a new and innovative R & D venture involving the exploration and discovery of biosensors for diagnostic product development. In staffing this project we are searching for a few outstanding self-motivated scientists with the desire to join our successful organization. The following positions are being sought:*

**RESEARCH INVESTIGATORS** - Responsible for the design and direction of experimentation and supervision of Scientists.

•**Immunosensors** - Opportunity requires a PhD in BioPhysics and at least two years of academic or industrial optical immunosensor experience. Optical waveguides of gratings experience preferred.

•**Electrochemical Sensors** - Position requires a PhD in BioChemistry or BioPhysics and at least two years of electrochemical sensor R&D experience. Experience with solid state devices or silicon microfabrication preferred.

**SCIENTISTS** - Responsible for design and performance of laboratory experiments in support of overall project.

•**Electrochemical Sensors** - Requiring a BS or MS in Chemistry with significant electrical engineering course work and 2 - 5 years of relevant electrochemical sensor experience, or BS or MS in Chemistry with emphasis in polymers and specific experience in electrochemical sensors electropolymerization reactions, membranes and electroanalytical methods.

•**Immunosensors** - Requiring a BS or MS in BioPhysics with significant optics course work and 2 - 5 years relevant optical immunosensor experience.

*At Boehringer Mannheim, we offer an excellent compensation and benefit program including a 401(K) and relocation package. Qualified applicants should send a resume with cover letter, including salary history, for confidential consideration. Boehringer Mannheim, Dept. RK, 9115 Hague Road, P.O. Box 50100, Indianapolis, IN 46250. An Equal Opportunity Employer.*

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From state-of-the-art resources to one of the nation's most scenic locales, Syva offers the best of the best. That's why our research scientists are proudly committed to forwarding Syva's lead in the diagnostic instrumentation marketplace. Our highly creative, multi-disciplinary team enjoys industry-standard-setting research support, enabling our scientists to make a significant impact on medical diagnostics research. The staying power we've gained as a result of these efforts now means new opportunity for you to join us in the following roles:

### **Immunologist**

Working in our monoclonal lab, you'll prepare antibodies to be used in the investigation of new immunodiagnostic methods. Your activities will include investigating novel methodologies and protocols, collaborating with a variety of diverse research groups, and participating in assay development projects. Additionally, you will supervise junior-level scientists.

Your relevant PhD must be complemented with 2+ years' related postdoctoral experience including hands-on knowledge of hybridoma technology. A strong background in immunology plus familiarity with immunodiagnostic assays, recombinant DNA techniques, protein chemistry, and microbiology is essential.

### **Synthetic Organic Chemist**

Synthesize and characterize diverse and complex compounds, dyes, haptens, and their conjugates with various proteins. Will measure spectroscopic, kinetic and other physical properties of target compounds. This will involve developing manufacturing procedures as well as using synthesized materials to develop immunodiagnostic assays. You must possess a PhD in Organic Chemistry as well as 2+ years' experience in synthetic methods and modern analytical techniques using FT-NMR, IR, UV, and HPLC.

### **Biochemist**

You will conduct independent research in the development of new bioanalytical methods related to medical diagnostics. You'll need a PhD in Biochemistry and 2+ years' experience in protein chemistry and bioanalytical techniques such as chromatography, spectroscopy, and immunoassays.

Syva offers an excellent benefits and salary package, including an incentive bonus and generous relocation assistance. Send/FAX your resume, indicating position of interest, to Syva Human Resources, Dept. DP, MSI-105, P.O. Box 10058, Palo Alto, CA 94303. FAX: (415) 857-1374. Or call our 24-hour Job Hotline at (415) 354-7517 for more information about these positions and other current openings. Syva is an equal opportunity employer.

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in medical diagnostics.*



## **Immunologist**

Wyeth-Ayerst Research, one of the world's largest pharmaceutical research and development groups, has an immediate opportunity for an Immunologist in its Radnor headquarters.

Requirements include a BS/MS in Immunology, Microbiology, Molecular Biology or related science. Candidates should have experience in basic immunological or microbiological techniques. Experience in ELISA, western blotting, tissue culture, viral assays and animal handling are highly desirable.

Explore your exceptional career advantages with Wyeth-Ayerst. We offer a competitive salary, comprehensive company benefits and an innovative environment with top professional colleagues. For confidential consideration, forward your resume with salary requirements to: **Wyeth-Ayerst Research, Position #148, P.O. Box 8299, Philadelphia, PA 19101.** Equal Opportunity Employer, M/F/H/V responses encouraged. Principals Only.



## **Research Assistants Atherosclerosis Research**

**Bristol-Myers Squibb Pharmaceutical Research Institute** is continuing to expand our extensive research efforts in the areas of cardiovascular, infectious, oncologic and metabolic diseases. This expansion has created the following opportunities in basic and applied research.

Currently, we are seeking two individuals to participate in the drug discovery process applied to mechanisms of atherogenesis. The current focus centers on the enzymology and regulation of hepatic cholesterol and lipoprotein metabolism and on oxidative modification of low density lipoproteins. Experience in cell culture, electrophoretic techniques, radioisotope methods, lipoprotein isolation, UV and fluorescence spectroscopy, DNA and RNA hybridization, chromatographic techniques highly desirable. Requires a BS or MS with 2-5 years research experience.

Please forward your resume to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Department 167, P.O. Box 4000, Princeton, NJ 08543-4000.** An equal opportunity employer.



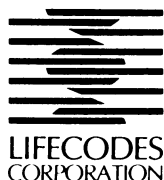
**Bristol-Myers Squibb Company**

## CHEMIST

Founded in 1982 on the principle that within our DNA lie answers to the most profound questions of life, Lifecodes Corporation has advanced to the forefront of DNA-based genetic testing and research. With support from our parent company, Quantum Chemical Corporation, we are experiencing rapid growth and require the skills and talents of a Chemist to help us move toward the next breakthroughs in genetic testing.

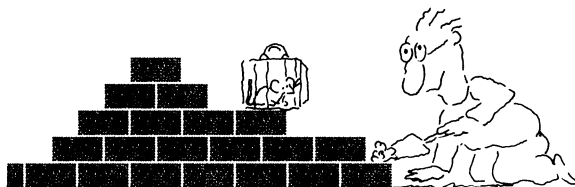
The selected candidate will be responsible for synthesizing oligonucleotides and modifying them chemically. This requires a BS/MS in Organic Chemistry and/or training and experience in oligosynthesis, 3-4 years' experience in oligonucleotide chemistry, and experience in making enzyme conjugates. You must also have worked with an ABI 380 B DNA synthesizer or equivalent and have experience with the use of HPLC and UV/VIS Spectroscopy. DNA sequencing experience would be a plus.

If you are ready to impact lives and share in our dedication to understanding the language of our genes, we offer competitive salaries and excellent benefits including educational assistance, complete medical/dental, 401K savings and pension. Please forward your resume to: Director, Human Resources, Lifecodes Corporation, Saw Mill River Road, Valhalla, NY 10595. An Equal Opportunity Employer m/f.



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## Sr. Scientists Cell Biology

*If exploring exciting new areas  
in biotechnology is what you  
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Schering-Plough Research.*

Research leading to pharmaceutical breakthroughs has made Schering-Plough a major force in the health care industry. This is your opportunity to work on some of the most significant projects within our Biotechnology-Cell Biology Research Group.

These unique positions will focus on Cytokine Biology, especially with reference to autoimmune and inflammatory diseases. Ph.D. in Immunology or Cell Biology with 0-4 years' post-doctoral experience. Desired qualifications include proven expertise in any of the following areas: Receptor Biology and Signal Transduction, Cytokine Interaction in the development of Haematopoietic Progenitor cells and mature lymphocytes. Additional expertise in the use and operation of Fluorescence-activated cell sorters and animal models would be very desirable.

You can expect high visibility and the rare opportunity to work with a multidisciplinary team comprised of cell and molecular biologists, and protein chemists. And as a \$3+ billion leader, we can offer an excellent salary and outstanding benefits. For prompt consideration, please send your resume with salary history and indication of specialized field, to: Mr. G. Czuba, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

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

**Public Health Service  
National Institutes of Health**

**Clinical Endocrinology Branch  
Division of Intramural Research**

**Postdoctoral Position.**

Available immediately to investigate the role of tissue-specific gene regulation in early vertebrate development. The applicant should have a recent Ph.D. and/or M.D. A background in biochemistry, molecular biology, or developmental biology desired. Send curriculum vitae and addresses of three references to:

**Dr. Sheryl M. Sato  
NIDDK, CEB**

**National Institutes of Health  
Building 10, Room 8N322  
9000 Rockville Pike  
Bethesda, MD 20892**



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**POSTDOCTORAL FELLOWSHIP  
in Complex Systems Studies  
at the Santa Fe Institute**

The Santa Fe Institute will have one or more openings for postdoctoral fellows beginning in September, 1991.

The Institute's research program is devoted to the study of complex systems, especially complex adaptive systems. Systems and techniques under study include the economy; the immune system; the origin of life; artificial life; models of evolution; neural networks; genetic algorithms and classifier systems; complexity, entropy, and the physics of information; nonlinear modeling and prediction; cellular automata; and others.

Candidates should have or expect to receive soon a Ph.D. and should have backgrounds in theoretical physics or chemistry, computer science, mathematics, economics, game theory, theoretical biology, dynamical systems theory, or related fields. An interest in interdisciplinary research is essential.

Applicants should submit a curriculum vitae, list of publications, and statement of research interests, and arrange for three letters of recommendation. Send applications to:

Postdoctoral Committee,  
Santa Fe Institute, 1120 Canyon Road,  
Santa Fe, NM 87501

Applications or inquiries may also be sent by electronic mail to:

postdoc@sfi.santafe.edu

The Santa Fe Institute is an equal opportunity employer.

Application Deadline: February 1, 1991

**POSITIONS OPEN**

**POSTDOCTORAL FELLOW**

Postdoctoral position available with an active group studying the mechanisms of growth factor and oncogene intracellular signaling, and to develop novel agents with activity against signal transduction targets as potential anticancer drugs. Position offers excellent opportunities to collaborate and develop own research ideas working in modern, well-equipped facilities and a stimulating research environment. Stipend is based on qualifications and is highly competitive, with excellent benefits. Suitable for a Ph.D., M.D., or D.V.M. with a strong background in biochemistry, cell biology, pharmacology, etc. Send application, current curriculum vitae, and names and addresses/telephone numbers of three references to: **Dr. G. Powis, Department of Pharmacology, Mayo Clinic and Foundation, Rochester, MN 55905.** *An Equal Opportunity/Affirmative Action Employer.*

**FELLOWSHIPS IN TROPICAL BIOLOGY  
SMITHSONIAN  
TROPICAL RESEARCH INSTITUTE**

Predoctoral, postdoctoral, senior postdoctoral, and 10-week graduate student fellowships are available to conduct research at the Smithsonian Tropical Research Institute (STRI) in the Republic of Panama. With a scientific staff of 26, STRI is an international center for advanced study in tropical biology (ecology, paleoecology, evolution, behavioral ecology, plant physiology, molecular evolution) and archaeology. STRI provides logistic support for visitors at its facilities: a field station at Barro Colorado Island and housing and bench space adjacent to Soberania National Park (tropical moist forest); field accommodations at Fortuna in Western Panama (montane forest); marine laboratories on the Pacific and Atlantic coasts and a field station in the Caribbean; and a research library and laboratory complex in Panama City. For applications, contact:

**Office of Fellowships and Grants  
Smithsonian Institution, Drawer TB  
L'Enfant Plaza, Suite 7300  
Washington, DC 20560  
Telephone: 202-287-3271  
Deadline: 15 January annually**

*Awards are based upon merit, without regard to race, color, religion, sex, national origin, age, or condition of handicap of the applicant.*

**GRADUATE AND POSTDOCTORAL  
FELLOWSHIPS IN ANIMAL BEHAVIOR**

The Departments of Biology and Psychology at Indiana University announce a new NSF-supported Center for the Integrative Study of Animal Behavior. We are seeking outstanding candidates for interdisciplinary training in mechanistic and evolutionary approaches to the study of behavior. Focal areas for research include (i) mate choice and sexual behavior, (ii) orientation and migration, (iii) communication, (iv) parental behavior and development, and (v) learning. Graduate students should request application forms. Postdoctoral candidates should send curriculum vitae, statement of research interests, and three letters of recommendation. Deadline for initial competition is 15 December 1990. Graduate student deadline for 1991-92 is 1 February 1991. Postdoctoral applicants will be reviewed periodically. Reply to: **Research Training Group in Animal Behavior, Dr. Ellen D. Ketterson, Biology, or Dr. William D. Timberlake, Psychology, Indiana University, Bloomington, IN 47405.** *An Affirmative Action/Equal Opportunity Institution.*

**RESEARCH ASSOCIATE/POSTDOCTORAL**

Position will be available beginning March 1991. We are interested in studying the mechanisms of oxygen sensing mechanisms in the carotid body. Ongoing projects involve neurophysiological, biochemical, cell biology, and cell culture studies. Applicants should possess Ph.D. degree in physiology or other related science. Experience in any of the following techniques is preferred, but not essential: single nerve fiber recordings, intracellular measurements of cat ions, and immunocytochemical techniques applied to cell cultures. Send curriculum vitae and the names of three references to: **Dr. Nanduri R. Prabhakar, Pulmonary/Critical Care Division, Department of Medicine, Case Western Reserve University, 2074 Abington Road, Cleveland, OH 44106.**

*Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

**POSITIONS OPEN**

**POSTDOCTORAL FELLOW/RESEARCH  
SCIENTIST IN AQUATIC ECOLOGY**

The newly created Center for Lake Superior Ecosystem Research has an opening beginning September 1991. Experience in food web and ecosystem processes with emphasis on phytoplankton-zooplankton-fish interactions is required. Send curriculum vitae and two references to: **Dr. W. Charles Kerfoot, Co-Director Laser Center, Department of Biological Sciences, Michigan Technological University, Houghton, MI 49931.**

*Michigan Technological University is an Equal Opportunity Educational Institution/Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE**

Cardiac electrophysiology laboratory has immediate opening to study physiological regulation of Na/K pump in isolated cardiac myocytes. Primary responsibilities include computer simulation of a model of the Na/K pump and whole cell patch clamp technique. Applicant should send curriculum vitae, statement of research interest and objectives, name and address of three references to: **Dr. Joseph R. Stimers, Department of Pharmacology, Slot 611, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205.**

**POSTDOCTORAL RESEARCH ASSOCIATES**

Opportunities for two postdoctoral research positions in the Department of Microbiology and Immunology. Available project areas include genetics of antibiotic resistance and pathogenesis or genetics of anaerobic rumen bacteria (with Dr. C. Jeffrey Smith) and molecular biology of oncogene and lymphokine expression in normal and malignant cells (with Dr. James A. McCubrey). Additional project areas may include genetics of steroid biotransformations by anaerobes, genetics of *Bordetella pertussis* pathogenesis, and molecular studies of experimental autoimmune encephalitis. Nationally competitive salaries with fringes. Applicants should have the Ph.D. degree with training and experience in relevant areas of microbiology, molecular genetics, and immunology. Send cover letter, complete curriculum vitae, relevant publication reprints, and the names, addresses, and telephone numbers of three reference individuals to: **Postdoctoral Screening Committee, Department of Microbiology and Immunology, East Carolina University School of Medicine, Greenville, NC 27858-4354.**

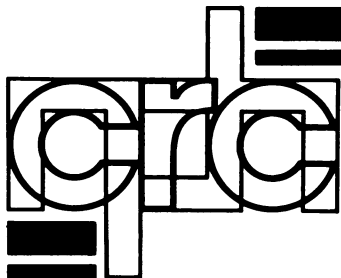
*East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employability at time of employment. It is requested this documentation be included with your application.*

**RESEARCH ASSOCIATE**

A research associate position is available immediately to study pancreatic islet cell development using cell biology and molecular biology approaches. A Ph.D. degree with experience in molecular biology is required. Send curriculum vitae to: **Dr. H. Kaung, Department of Pediatrics, Case Western Reserve University, 2101 Adelbert Road, Cleveland, OH 44106.** Telephone: 216-844-3798.

**BIOPHYSICAL CHEMISTS AND FLUORESCENCE SPECTROSCOPISTS.** Applications are invited from Ph.D. level individuals with experience in time-resolved fluorescence spectroscopy and its applications to the biochemical sciences. The individuals will be engaged in research in the areas of energy transfer and biopolymer conformation, quenching, and macromolecular dynamics. Additional responsibilities will include assisting scientists with planning and execution of experiments in the Center for Fluorescence Spectroscopy. Experience in frequency-domain fluorescence spectroscopy is especially desirable. Depending upon qualifications, the appointments can be at the **RESEARCH ASSOCIATE OR FACULTY** level (nontenure track). Send curriculum vitae, three letters of recommendation, copies of representative publications, and salary requirements to: **Spectroscopist Search Committee, c/o Dr. Joseph R. Lakowicz, University of Maryland School of Medicine, Department of Biological Chemistry, 660 West Redwood Street, Baltimore, MD 21201.** Application deadline: 30 November 1990. *Equal Opportunity/Affirmative Action Employer.*

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## CLINICAL RESEARCH CENTRE

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### CAREER APPOINTMENT IN MOLECULAR BIOLOGY

Applications are invited for a career scientific post with the Medical Research Council. The post is tenable at this Centre in the first instance. The successful candidate will work in the Division of Molecular Medicine, headed by Dr. James Scott, on molecular mechanisms involved in regulation of liver lipid metabolism, and the risk of coronary heart disease. Applicants should have at least five years' experience in molecular biology. In particular this may include:

Experience in DNA sequencing, manipulation and subcloning of DNA fragments, expression studies and mutagenesis. A background in cell biology, protein chemistry, genetics and a facility with computing are also desirable.

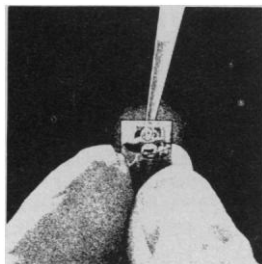
Remuneration will be at an appropriate point on the scale for university non-clinical academic staff. Prospective applicants are invited to discuss the post with Dr. J. Scott, Clinical Research Centre, telephone 081 869 3341.

There is easy access to buses, as well as British Rail and London underground stations (Metropolitan and Bakerloo lines). Benefits include index-linked pension, occupational health facilities, interest-free season ticket loans and 30 days annual leave.

Application forms and position description may be obtained from the Personnel Officer on 081 869 3436 quoting ref 111/1/4289, with whom completed forms should be lodged, together with full c.v. and an outline of research proposals. Closing date for completed applications is December 14, 1990.

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The track record of original research and discoveries by the scientists at the Janssen Research Foundation is impressive by any standard. Our efforts have resulted in more than 82,000 original molecules and an array of new pharmaceutical products that include IMODIUM®, NIZORAL®, SUFENTA®, HISMANAL®, ALFENTA® and ERGAMISOL®. Many more are in the pipeline, and it's that penchant for innovation that has created an outstanding opportunity for **Clinical Research Associates**.

Working in small teams, you'll be involved in ongoing drug studies. Current areas of interest include anesthesiology, gastroenterology, psychotherapy, mycology, parasitology, cardiology, oncology, allergy and immunology. And **Medical Writers, Biostatisticians**, and professionals in **Regulatory Affairs**

and **Professional Services** will find exciting opportunities at the Janssen Research Foundation as well.

For the clinical professional, few organizations can match the advantages at the Janssen Research Foundation. Research and development is the mainstay of all we do, and as a member of the Johnson & Johnson Family of Companies, we offer a progressive environment, opportunities for advancement, competitive salary and superlative benefits, including our on-site wellness center.

We are planning to move to our state-of-the-art facilities currently under construction in scenic Washington Crossing, NJ in early 1992. If you'd like to bring your innovative ideas to an organization that will appreciate them, send your resume with salary history in confidence to: the Janssen Research Foundation, Employment Office Box S1190, 40 Kingsbridge Road, Piscataway, NJ 08855. An Equal Opportunity/Affirmative Action Employer M/F/H/V.

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## **Senior Scientists Anti-Viral Research**

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Our dedication to pharmaceutical breakthroughs has made Schering-Plough a \$3+ billion health care leader. To maintain our leading edge, we seek accomplished professionals with demonstrated excellence in research.

Responsibilities will include applying basic research discoveries to new approaches to controlling viral disease. To qualify you must hold a Ph.D. and 0-3 years' post-doctoral experience in Molecular Virology, Viral Biochemistry, or Viral Pathophysiology.

We offer highly competitive salaries, an excellent benefits package, and an environment that is conducive to continuing growth. For immediate, confidential consideration, please forward your resume to: Mr. G. Czuba, Schering-Plough Research, P.O. Box DD 89-54, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

***What you have in mind, we put in action.***



**Schering-Plough**

## **RESEARCH SCIENTISTS**

Applications are invited from individuals possessing a BS or MS degree and research experience in molecular biology and protein expression. The successful candidates will join a research team working on the development of novel anti-viral agents targeted to virus-receptor interactions (Greve et al., Cell 56, 839-847).

The company is located in a new research facility near New Haven and Yale University, and midway between Boston and New York City. We offer competitive salaries, excellent benefits, and a stimulating and challenging work environment.

Applicants should forward a curriculum vitae along with a statement of research interest and capabilities in confidence to: **Research Director, Molecular Therapeutics, Inc., 400 Morgan Lane, West Haven, CT 06516.**

An Equal Opportunity Employer M · F · H · V



**Molecular  
Therapeutics Inc**

### **JOB OPENING**

The Massachusetts Institute of Technology (MIT) announces an opening for a Research Scientist (Sponsored Research Staff) position in the Harvard-MIT Division of Health Sciences and Technology.

**DESCRIPTION:** Research Scientist who is highly qualified in research in biomedical/bioelectrical engineering particularly in the areas of signal processing, EEG mapping, modeling, computer programming, and data base design and development. To conduct a program of research on the development of cardiac mapping system and to design electrophysiological experiments which utilize that system. Will be responsible for publication of the research results, presentation at scientific meetings. There will be some supervision of junior students. Will be required to interact closely with collaborators and colleagues in cardiovascular and biomedical engineering disciplines. (Salary range: \$25,000-\$29,000).

**MINIMUM QUALIFICATIONS:** A doctoral degree in Electrical Engineering and/or Computer Science or Biomedical Engineering and at least one year of postdoctoral training in body surface mapping, and high speed dipole techniques are required. Additional postdoctoral experience in biomedical/bioelectrical field—especially in dipole tracing methods preferred. Sufficient computer programming background (similar to that required of systems programmer) is essential. Past experience with human and animal experiments strongly desired. Publications in internationally accepted journals are also required.

Interested persons should address inquiries and resumes (two copies) to:

Ms. Ramona Alston, Personnel Officer  
Office of Personnel Services and Employment  
E19-297  
Massachusetts Institute of Technology  
77 Massachusetts Avenue  
Cambridge, MA 02139  
(617) 253-4067

JOB REFERENCE NO: R90-159

Massachusetts Institute of Technology is an Affirmative Action Equal Opportunity Employer.



**RUTGERS, THE STATE UNIVERSITY OF  
NEW JERSEY  
AND  
THE UNIVERSITY OF MEDICINE AND  
DENTISTRY OF NEW JERSEY  
ROBERT WOOD JOHNSON MEDICAL SCHOOL**

**Announce  
a Shared Interdisciplinary Core Curriculum in  
MOLECULAR AND CELL BIOLOGY**

The Graduate Programs of Rutgers University and UMDNJ-Robert Wood Johnson Medical School are seeking outstanding applicants for this interdisciplinary curriculum. Successful applicants will be awarded a fellowship providing an annual stipend of \$12,000 plus tuition. Students will take a program of interdisciplinary courses, seminars, and research laboratory rotations. Research opportunities in Molecular and Cell Biology exist in all participating graduate programs of both universities, including the New Jersey Center for Advanced Biotechnology and Medicine, Waksman Institute, and Center for Agricultural Molecular Biology. Students will obtain the Ph.D. degree from the program in which they do their research project.

Students interested in applying or receiving further information should write to:

Michael J. Leibowitz, M.D., Ph.D.  
Director, Core Curriculum in Molecular and  
Cell Biology  
Department of Molecular Genetics and Microbiology  
UMDNJ-Robert Wood Johnson Medical School  
675 Hoes Lane  
Piscataway, New Jersey 08854-5635

*An Equal Opportunity/  
Affirmative Action Employer/M/F/H/V*

**Research Engineer:** Conducts exploratory research to identify & understand fundamental physical & chemical mechanisms governing the formation & removal of deposits in reciprocating internal combustion engines, leading to development of new fuel deposit control additives. Performs state-of-the-art engine instrumentation, software & hardware development for engine control & data acquisition. Designs, implements, evaluates & interprets engine experiments related to the above. Works closely with Ph.D. Chemists to evaluate & interpret fuels/additives analytical test results. Req's Ph.D. in Mechanical Engineering w/ a graduate level minor in Chemistry or Ph.D. degree in Chemical Engineering; research background in experimental & theoretical analysis of combustion & emissions in the reciprocating internal combustion engine & on synthesizing, characterizing & analyzing liquid fuels for reciprocating internal combustion engines & their effects on engine combustion, performance & emissions (above should be demonstrated by academic dissertation & technical publications); theoretical knowl. in thermodynamics & chemical kinetics, internal combustion engines, mass & heat transfer, & electronic experimental instrumentation, as demonstrated by graduate level academic course work; demonstrated abil. (as evidenced by at least 2 yrs' relevant laboratory experimentation) to: utilize analytical research instruments such as Chromatographs, non-dispersive infrared gas analyzers, viscometers, & distillation apparatus as they relate to analysis of fuels for & emissions from reciprocating internal combustion engines; & develop computer programs, set-up & use high speed data acquisition systems to conduct detailed analysis of combustion in the reciprocating internal combustion engines. \$48K/year. **Job & interview site: Richmond, CA. Send this ad & your resume to Job #WS 19267, P.O. Box 9560, Sacramento, CA 95823-0560 not later than 12-1-90.**



# NEUROGENETIC CORPORATION

Neurogenetic Corporation is a rapidly growing biotechnology company involved in the discovery and cloning of neurotransmitter receptors and other sites of drug action. By pioneering advances in the basic neurosciences we are creating a pathway to the next generation of neuro-psychiatric treatments. Current expansion has created career opportunities for Ph.D. scientists with postdoctoral experience and the following qualifications:

## **Cell Biology Group Leader:**

This key position requires experience in directing a mammalian cell biology program. The ideal candidate would have experience in the design and implementation of cell culture quality control procedures, and familiarity with second messenger systems, mass cell culture techniques, expression vectors, and transfection technologies.

## **Senior Cell Culture Associate:**

Responsibilities include the continuous culture of mammalian cell lines for pharmacological assay. A BS or MS in biological sciences and 3-5 years experience in mammalian cell culture are required.

## **In Situ Hybridization Histochemist:**

This position provides an opportunity for a scientist skilled in the *in situ* use of both oligo and ribonucleotide probes to further the understanding of neurotransmitter localization and function. Demonstrated expertise in projects involving the use of *in situ* hybridization is required.

## **Biochemical Pharmacologist:**

Candidates should have strong backgrounds in receptor pharmacology in both receptor binding and second messenger assays including expertise in computer-assisted data analysis. The successful applicant will become part of our receptor discovery and characterization team using heterologous expression systems to explore receptor properties, function, and drug action.

## **Neuroanatomist:**

Candidates must have proven expertise in mammalian neuroanatomy. Additional experience in human neuroanatomy, functional neuroanatomy, and chemical neuroanatomy is extremely desirable. The successful applicant will be an essential member of our receptor localization team utilizing both receptor radioautography and *in situ* hybridization techniques to explore the distribution and function of neurotransmitter receptors.

Neurogenetic Corporation occupies well-equipped, modern laboratories in a suburban environment near New York City. We offer a stimulating multidisciplinary research environment, competitive salaries and benefits. For confidential consideration, please send Curriculum Vitae to:

**Human Resources Manager  
Neurogenetic Corporation  
215 College Road, Paramus, New Jersey 07652**

THE

BIOGEN

MISSION

One of only three bio-pharmaceutical companies to show a profit in 1989, Biogen, Inc., is beginning its next growth stage as it becomes a fully integrated pharmaceutical company. Products are targeted for use in the AIDS therapeutics, cardiovascular, anti-inflammation, and selected cancer markets.

## Scientists

Biogen is currently in need of accomplished Scientists to join our on-going program of study in the molecular biology and pathogenesis of human papillomavirus infection. Primarily, these individuals will conduct in-depth studies of virus/host interactions that occur during human papillomavirus infection to define pathogenic mechanisms and determine potential drug targets. The establishment of cell culture and/or animal model systems will be involved. Qualified candidates should possess a PhD and/or MD degree(s) and a minimum of 2 years' experience in one or more of the following: molecular biology of the skin; human or bovine papilloma virology; analysis of human or animal skin biopsies.

Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available. Our Relocation Assistance is only one of the benefits you can look forward to at Biogen.

**To apply for these immediate openings, send your resume to Biogen, Inc., Ref. SMS1116, 14 Cambridge Center, Cambridge, MA 02142. Biogen is an Equal Opportunity Employer.**

BIOGEN

## Protein Chemist

### San Francisco/Bay Area

We're ALZA, a manufacturer of innovative drug delivery systems with a long standing tradition of scientific and manufacturing excellence. We have an opening for a Protein Chemist at our Palo Alto headquarters.

You will perform and supervise experiments designed to determine the possibility of delivering peptides by electrotransport. We are looking for a PhD protein chemist, 2-5 years postdoctoral experience, with a significant understanding of the stabilization and characterization of proteins. In addition, a background in physical chemistry, and/or electrochemistry is desirable.

For consideration, please call Darlene Markovich at (415) 494-5214; or fax your cv/resume to (415) 494-5151; or send it to: ALZA, Employment Department, 950 Page Mill Road, P.O. Box 10950, Palo Alto, CA 94303-0802. EOE.

alza

## RESEARCH OPPORTUNITIES IN MOLECULAR AND CELLULAR BIOLOGY

**Amgen**, a recognized and innovative leader in the discovery and development of human therapeutic products through applied biotechnology, is actively seeking scientists at BS, MS and Ph.D. levels to conduct research within our Colon Biology program. The objectives of this program will be defining, isolating, cloning and characterizing protein factors involved in the growth and differentiation of the colonic epithelium.

### RESEARCH SCIENTISTS Dept. #549

Candidates for Research Scientist positions must have a Ph.D. in molecular or cellular biology and 2 to 5 years' relevant postdoctoral experience. Candidates must have a strong publication record reflective of their achievements.

Applicants for Molecular Biology positions should have a strong foundation in molecular biology and related techniques including the construction and screening of cDNA libraries. Experience in expression cloning is particularly valuable.

Candidates for Cellular Biology positions must have experience in bioassay development and protein purification. This investigator will be responsible for establishing appropriate bioassays for growth and/or differentiation factors and participating in their isolation and characterization. Experience in intestinal epithelium is particularly desirable.

### POSTDOCTORAL SCIENTIST Dept. #550

Candidates for postdoctoral positions must have a Ph.D. in molecular biology or a related discipline and be familiar with routinely used methodologies in cDNA cloning.

### RESEARCH ASSOCIATES Dept. #551

Minimum qualifications for these positions include a BS in an appropriate field with two years' research experience in molecular and cellular biology. Experience in basic recombinant DNA methodologies and cell culture techniques is highly desirable.

**Amgen** offers a stimulating and challenging research environment on the leading edge of biotechnology. Our need for these positions reflects an ever increasing commitment to the development of significant products for human health care through excellence in research.

If you have the necessary skills and would like to be a part of an organization that places a high priority on its human resources, please send a complete CV, in confidence, to:

**AMGEN, INC.**  
Recruitment, Dept. # (please specify)  
Amgen Center  
Thousand Oaks  
CA 91320-1789

Equal  
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Employer

AMGEN

## MOLECULAR BIOLOGY

QIAGEN INC. is a fast growing Los Angeles area company, committed to excellence in the development and marketing of unique and innovative products for molecular biology. We are seeking highly motivated and talented individuals to join our sales & marketing group.



### Marketing Manager

Responsible for launching newly developed products and for developing marketing plans to continue to promote existing products. Responsibilities will also include competitive market analysis, technical writing, training, development of marketing communications tools for the sales team to effectively promote and sell the products and interacting with customers. Sales experience in related fields is desirable. Ph.D./MS degree in molecular biology or related disciplines with 2+ years of laboratory experience is considered important.

### Technical support

MS/BS degree in molecular biology or related disciplines with 2+ years of laboratory experience in molecular biology. Applicants should have good communication skills, proven technical writing skills and the ability to work independently.

### Technical Sales Representatives

Applicants should have a BS/MS degree in molecular biology or related field and 2+ years of lab experience in molecular biology. Prior sales experience is preferred, but not necessary. Sales territories are available in the Northwest, Northeast, Southeast and Midwest.

We offer competitive salaries, benefits including relocation assistance and a challenging, high growth environment. For immediate consideration, please send resume, salary history and reference names to: QIAGEN INC., Human Resources, 9259 Eton Avenue, Chatsworth, CA 91311 (Fax: 818 718-2056)



## The University of Sydney

AUSTRALIA

### DEPARTMENT OF BIOCHEMISTRY LECTURER/SENIOR LECTURER

#### Macromolecular X-Ray Diffraction

Reference No. 12/05

The duties will consist of teaching and research in Biochemistry. Preference will be for someone with an active research interest in the determination of the structure of biological macromolecules (proteins and/or nucleic acids) by the use of X-ray diffraction methods. The appointee will be responsible for developing an X-ray diffraction unit within the Department. Initially, however, X-ray, computing and graphics facilities under the direction of Professor Hans Freeman in the nearby Department of Inorganic Chemistry will be available. Current research in physical biochemistry in the Department is concentrated on high resolution NMR studies of (i) metabolism and transport in cellular systems and (ii) protein structure and protein/DNA interactions, and (iii) the interactions between macromolecules as measured using analytical ultracentrifugation. Other important interests in the Department include molecular biology of human inherited diseases and site-directed mutagenesis of enzymes. Excellent general facilities for biochemical research are available. With the approval of the University, staff with rank of Lecturer and above may undertake limited consulting work. As for appointments to lectureships in general at the University the present one has the potential to lead to tenure and will be probationary for up to 3 years.

The successful applicant will commence duties as soon as possible after 1 January 1991. Further information from Professor P.W. Kuchel (612) 6923709 or Professor R.G. Wakes (612) 6922504.

**Salary:** Lecturer \$A33,163-\$A43,096 p.a.

Senior Lecturer \$A43,984-\$A51,015 p.a.

Assistance with relocation expenses to Sydney will be provided.

**Closing:** 30 November, 1990.

**Method of application:** Applications, quoting Reference No., and including curriculum vitae, list of publications and the names, addresses and fax nos., of three referees (only three referees will be contacted in the first instance and if more referees are nominated they should be ranked in order of preference) to the Registrar, Staff Office, University of Sydney, N.S.W. 2006 Australia by the above closing date.

*Equal employment opportunity and  
no smoking in the workplace are University policy.*

63425

## Research Opportunities

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company is seeking experienced scientists and postdoctoral candidates for its expanding efforts in diabetes and metabolism.

### Sr. Research/ Research Associate

Research positions are available in the Pharmaceutical Research Division for independent, highly motivated scientists to study biochemical and pharmacological aspects of metabolism and hormone action. Successful applicants for the research scientist positions will possess an MD or PhD in biochemistry, pharmacology or physiology with 2 - 5 years' postdoctoral experience in metabolism. These individuals will join a multidisciplinary effort to study the pathophysiology of hormonal disorders such as insulin resistance pertaining to diabetes, obesity and cardiovascular diseases. Experience with in vivo pharmacological methods for the evaluation of animal models of these diseases is an advantage. However, ability, enthusiasm and motivation are more important than the precise nature of previous experience.

### Postdoctoral Research Fellowships

The postdoctoral positions will focus on the cellular and molecular aspects of hormone action. Current areas of study include: 1) molecular mechanisms of insulin action, 2) hormonal regulation and characterization of enzymes involved in the synthesis and hydrolysis of glycosyl-phosphoinositides, 3) covalent interactions between these lipids and target proteins, 4) identification of novel serine kinases relevant to growth factor actions, and 5) molecular characterization of hormone receptors. Applicants should be recent MD or PhD graduates in biochemistry, pharmacology or cell biology with some experience in the areas of molecular biology, protein purification and sequencing, carbohydrate structure and function, or membrane and lipid biochemistry.

Our modern facilities are located adjacent to the University of Michigan campus. Excellent compensation and benefits are only part of the package. PARKE-DAVIS fosters an exciting, dynamic and challenging research environment with ample opportunities for personal and professional creativity and growth. If you are qualified and wish to collaborate in this vital research environment, please send a curriculum vitae and a list of references, in confidence to Mr. B. Burmeister, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"

"Equal Opportunity in Action"



## PARKE-DAVIS

A DIVISION OF

## WARNER LAMBERT



## POSITIONS OPEN

### FOREST INDICATOR DEVELOPMENT AND RESEARCH COORDINATOR

Provide senior level scientific support for the forest component of a national Environmental Monitoring and Assessment Program (EMAP). Develop plans for evaluating and interpreting indicators of the status and trends in the condition of U.S. forests and coordinate and recommend forest indicator research activities. Position requires a Ph.D. in forestry or related discipline with emphasis on forest ecosystem structure and function; 5 years (minimum) of applied forest ecological research experience that demonstrates knowledge of: (i) scientific principles and theories underlying ecology; (ii) concepts, factors, and conditions which influence the structure and function of ecosystems; (iii) major forest types, including associated wildlife and understory vegetation; and (iv) ecosystem stressors and indicators for monitoring stressor effects. Must demonstrate creativity in providing new insight for addressing complex ecological problems, ability to provide leadership and cooperation in an interdisciplinary environment, and the ability to effectively communicate both orally and in writing.

Submit a cover letter specific to this position, résumé, unofficial transcripts, and a list of three professional references by 30 November 1990 to:

Susan Carey  
NSI Technology Services Corporation.  
1600 S.W. Western Boulevard  
Corvallis, OR 97333

A subsidiary of ManTech International Corporation.  
An Equal Opportunity Employer.

**PUBLIC INTEREST SCIENTIST.** Starting 1 December 1990. A national environmental organization seeks Ph.D. for toxic substances project. Involvement with cancer risk assessment, impacts on children's health, waste management, and clean-up. Experience in biochemistry, toxicology, and public health policy advocacy. Excellent communication skills; travel required. Prior advocacy organization or regulatory agency experience a plus. Salary commensurate with experience and excellent benefits. Send résumé, writing samples, and references to: David A. Smith, Natural Resources Defense Council, Inc., 40 West 20th Street, New York, NY 10011. Equal Opportunity Employer. Minorities and women are encouraged to apply.

### RESEARCH SCIENTIST POSITIONS

The U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) is the Department of Defense's lead laboratory in research for defense against chemical warfare agent toxicity. USAMRICD is part of the Aberdeen Proving Ground complex located 30 miles northeast of Baltimore on the Chesapeake Bay. USAMRICD has several full-time civilian research positions available in the pharmacology, toxicology, and chemistry fields with the starting grade of GS-12 or a grade commensurate with education and experience. Typical research includes the development of testing models and execution of research plans to evaluate the efficacy and safety of candidate drugs against cholinesterase inhibitors, DNA alkylating agents, and other metabolic toxins. A Ph.D. is highly desirable. U.S. citizenship is required and applicants must be able to obtain a security clearance. To apply, send résumé to: Ms. Mary Boggs, U.S. Army Aberdeen Proving Ground Support Activity, Civilian Personnel Office, Attention: STEAP-CP-RT, Aberdeen Proving Ground, MD 21005-5001. An Equal Opportunity Employer.

**RESEARCH ASSOCIATE.** Conduct research involving interaction of electromagnetic (EM) radiation with cloud droplets and atmospheric aerosols; develop a computer model based on optics and aerosol physics; work with IBM 3081 mainframe, SAS (Statistic Analyze System) software, and FORTRAN language; 40 hours per week; \$30,000 per year. Requirements: M.S. degree in physics and 1 year of experience in the job offered or 1 year of programming experience involving optical properties of spheres, spheruloids, and axisymmetric particles corresponding to cloud droplets and aerosols, working with IBM 3081 mainframe, SAS software, and FORTRAN language. Must have proof of legal authority to work in the United States. Send résumé to: Oklahoma State Employment Service (5515), 3740 Springlake Drive, Oklahoma City, OK 73111. Refer to Job Order #091283.

## POSITIONS OPEN

### RESEARCH ASSISTANT PROFESSOR UNIVERSITY OF WASHINGTON

The Department of Pharmaceutics invites applications for a full-time, non-tenure-track research faculty position. The successful applicant is expected to develop a research program in the area of in vivo/in vitro correlation of hepatic drug metabolism with a particular focus on the cytochrome P-450 system. Candidates should have an expertise in in vivo pharmacokinetic modeling, the assessment of in vitro metabolic kinetics in subcellular fractions and purified enzymes, and techniques for P-450 enzyme purification and characterization. A letter of application, including curriculum vitae, a statement of current and planned research, and three letters of reference, should be sent to: Danny D. Shen, Ph.D., Chairman, Search Committee, Department of Pharmaceutics, BG-20, University of Washington, Seattle, WA 98195. Applications will be accepted until 15 December 1990. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

The Department of Psychiatry at the University of California, Irvine, is seeking an **ACADEMICALLY ORIENTED RESEARCHER** (nontenured) to develop and supervise a research program involving positron-emitting radiopharmaceuticals for positron-emission tomography studies of regional cerebral metabolism and physiology. A Ph.D. in radiochemistry or nuclear chemistry, and supervisory/administrative experience of radioisotope production devices is essential, as well as experience in the operation and use of small biomedical cyclotrons. A minimum of 1 year of experience in the synthesis and development of compounds radiolabeled with fluorine-18, carbon-11, and oxygen-15 is also required. Salary and academic rank is negotiable and will be commensurate with the degree of training and previous experience. Send curriculum vitae and three references to: William E. Bunney, Jr., M.D., Professor and Chair, Department of Psychiatry, UCIMC, 101 City Drive South, Building 53, Room 311, Orange, CA 92668.

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

### RESEARCH SCIENTIST

Research scientist position is available to investigate the genetics of plasmids isolated from rapidly growing mycobacteria, the construction of Schurtle vectors, and the development of transformation methodologies. The position will also require the ability to train and teach laboratory personnel the mycobacteriological techniques pertinent to this research program. Candidate must have a Ph.D. degree in microbiology with 4 to 5 years of relevant research experience, publications in the field, and demonstrated ability to develop a strong independent research program in this area. Applicants should submit curriculum vitae, a statement of research interest, and three reference letters by 16 December 1990 to: Dr. Arthur Bollon, Chairman, Department of Molecular Genetics, Wadley Institutes, 9000 Harry Hines Boulevard, Dallas, TX 75235.

**RESEARCH ASSOCIATE.** A position is available for an experienced operator of a flow cytometer and cell sorter as part of a basic research group studying the use of MAbs for diagnosis and therapy of breast cancer. Salary negotiable. Send résumé to: Jerry A. Peterson, Ph.D., John Muir Cancer and Aging Research Institute, 2055 North Broadway, Walnut Creek, CA 94596. Telephone: 415-943-1167.

Equal Opportunity Employer.

**RESEARCH ASSOCIATE.** Perform molecular and cellular study of human papillomavirus, its infectious mechanisms and relationships to human cervical carcinoma and other diseases. Forty hours per week, 9:00 a.m. to 5:30 p.m.; \$480.77 per week. Require B.S. in medicine or biochemistry and 2 years of experience as research associate or assistant. Require experience in study of human infectious diseases, using methods of molecular biology, protein biochemistry and cell biology, in techniques such as PCR, DNA sequencing, recombinant DNA, gel electrophoresis, DNA and RNA probe preparations, Southern/Northern/Western blotting, FPLC, ELISA, RIA and their competition assays; and have knowledge of epidemiology and immunology. Mail two résumés and copy of the advertisement to: Department of Employment Services (DOES), 500 C Street, #325, Washington, DC 20001. JO# 9084. Must prove legal right to work in the United States.

## POSITIONS OPEN

**ELECTRICAL/ELECTRO-OPTICS ENGINEER AND SPECTROSCOPIST.** Applications are invited from Ph.D. level individuals with experience in electro-optics and acousto-optics and the ability to construct prototype electronic and optical instruments for spectroscopy. Experience with or knowledge of fluorescence spectroscopy, imaging, chemistry, and/or biochemistry is highly desirable. The research will involve design, construction, and testing of advanced fluorescence instrumentation. Depending upon qualifications, the appointments can be at the **RESEARCH ASSOCIATE OR FACULTY** level (non-tenure track). Send curriculum vitae, three letters of recommendation, copies of representative publications, and salary requirements to: **Electro-Optics Search Committee, c/o Dr. Joseph R. Lakowicz, University of Maryland School of Medicine, Department of Biological Chemistry, 660 West Redwood Street, Baltimore, MD 21201.** Application deadline: 30 November 1990. Equal Opportunity/Affirmative Action Employer.

**RESEARCH PHYSICIST.** Conduct experimental laser-induced plasma research in atomic processes related to tokamak fusion and astrophysical plasmas. Study charge transfer between multiply charged ions and neutrals at thermal energies. Plan experiments and design apparatus including radio-frequency quadrupole ion traps, vacuum systems, electronic control systems. Design and fabricate high-speed electronic circuits based on TTL and/or CMOS. Supervise graduate and undergraduate students. Requires Ph.D. in physics and 2 years of experience in laser and plasma physics research. Experience must include plasma confinement, laser spectroscopy, operation of CW/pulsed lasers and dye lasers, research in laser matter interaction, laser optics, high-vacuum systems, and design and building digital switching and analog electronic circuits. Must be fluent in FORTRAN and BASIC. An Affirmative Action/Equal Opportunity Employer. Salary: \$28,000 per year. Job site/interview: Las Vegas, Nevada. Send résumé to: **Employment Security Department, 135 South 8th Street, Las Vegas, NV 89101, Re: Job Order # 9066295.**

### DEPARTMENT OF BIOLOGY TEMPLE UNIVERSITY

As part of a program of research expansion, the Department of Biology at Temple University anticipates three positions for highly qualified individuals.

• **A SENIOR SCIENTIST** with the possibility of appointment as departmental chair. We are interested in a person with research interests in biochemistry or molecular biology who would complement our strengths in developmental biology.

• **A PHYSIOLOGIST** with research interests either in cellular, developmental, organismal, or neural physiology.

• **A MOLECULAR BIOLOGIST or BIOCHEMIST** with research interests in developmental, cellular, or neuro-biology.

Candidates should have an active research program, a commitment to undergraduate and graduate education, and an ability to interact with biologists with diverse interests. The department is broadly based with major strengths, in addition to developmental biology, in cellular biology, neuroscience, physiology, molecular biology, and genetics. The department includes 24 faculty and has an established graduate program leading to the M.A. and Ph.D. Candidates should submit research plans, curriculum vitae, and the names of three references to: Dr. Joel B. Sheffield, Chair, Department of Biology, Temple University, Philadelphia, PA 19122. An Equal Opportunity/Affirmative Action Employer.

**STAFF SCIENTIST.** Ionospheric physics. Direct research in development of improved techniques in the modeling of the ionosphere and its effects on high-frequency radio wave propagation; will act as technical expert on matters concerning ionospheric propagation relating to the design evaluation, single-site location, and adaptive arrays. Will conduct research in ionospheric physics and prediction of total electron content using the international reference ionosphere. Ph.D. in theoretical solar astrophysics. Two years of experience in job offered. Forty hours per week, 8:00 a.m. to 5:00 p.m.; \$70,000 per year. Please send résumé to: **Illinois Department of Employment Security, 401 South State Street, 3 South, Chicago, IL 60605, Attention: Mary Millea, Reference #V-IL-1585-M.** No calls. An employer-paid ad.

# **AAAS/1991-92**

## **Science & Engineering Fellowships**

### **CONGRESSIONAL**

#### **AAAS Congressional Science & Engineering Fellows Program**

Fellows spend one year on Capitol Hill working with Members of Congress or congressional committees as special assistants in legislative and policy areas requiring scientific and technical input. Two fellowships will be offered, with annual stipends of \$38,000.

### **EXECUTIVE BRANCH**

#### **AAAS-Sloan Executive Branch Science & Engineering Fellows Program**

Fellows work in the White House Office of Science and Technology Policy, for one or two years, providing expertise in industrial R&D, technology transfer, international competitiveness, and related issues. Two Fellows will be selected: one a scientist or engineer with at least 15 years experience, at a minimum annual stipend of \$75,000; the other with about five years experience, at a minimum stipend of \$40,000. Applicants must be U.S. citizens.

### **DIPLOMACY**

#### **AAAS Science, Engineering, & Diplomacy Fellows Program**

Fellows work in international affairs on scientific and technical subjects for one year, either in foreign policy at the U.S. Department of State or in international development for the U.S. Agency for International Development. Approximately 12 Fellows will be selected. The annual stipend varies with experience, starting at approximately \$36,000. Applicants must be U.S. citizens.

### **ENVIRONMENTAL**

#### **AAAS Environmental Science & Engineering Fellows Program**

Fellows work as special research consultants with the Office of Research and Development of the U.S. Environmental Protection Agency for 10 weeks in the summer. The detailed, future-oriented research assists ORD in assessing the significance of long-range environmental problems. The stipend is \$850 a week. Applicants must be permanent residents of the U.S. Ten Fellows will be selected.

Applicants should be postdoctoral to mid-career scientists and engineers, from any physical, biological, or social science or any field of engineering.

The programs are designed to provide each Fellow with a unique public policy learning experience; to make practical contributions to the more effective use of scientific and technical knowledge in the U.S. government; and to demonstrate the value of science and technology in solving important societal problems.

All Fellows participate in a rigorous orientation on the relevant congressional and executive branch operations and foreign affairs plus a year-long seminar series on issues involving science, technology, and public policy.

The application deadline is January 15, 1991, for the Congressional, Diplomacy, and Executive Branch programs and March 1 for the Environmental program. The three year-long programs begin in September 1991, and the 10-week Environmental program begins in June.

***For additional program information and application instructions, write:***

**Directorate for Science and Policy Programs (FPO)**

**American Association for the Advancement of Science**

**1333 H Street, NW, Washington, DC 20005 ♦ 202/326-6600**

## 1991 Summer Courses

### MARINE BIOLOGICAL LABORATORY



**BIOLOGY OF PARASITISM: MODERN APPROACHES** (June 16-August 16) This course, for 16 advanced students focuses on the molecular basis of parasite function and the host/parasite interaction with special emphasis on the most recent and exciting developments in this area. The course has four sections: cell biology, immunology, molecular biology, and biochemistry of parasites. Each section includes daily lectures from course faculty and outside speakers, and intensive laboratory experimentation. Director: John C. Boothroyd, Stanford University.

**EMBRYOLOGY: CELL DIFFERENTIATION AND GENE EXPRESSION IN EARLY DEVELOPMENT** (June 16-July 27) An advanced level course intended for graduate students, postdoctoral fellows, and other research scientists who wish a current treatment of major issues in the experimental analysis of developmental biology of the embryo, and the diverse intellectual approaches now useful in this field. Limited to 24 students. Director: Eric H. Davidson, California Institute of Technology. Assistant Director: J. Richard Whittaker, Marine Biological Laboratory.

**MARINE ECOLOGY: CONCEPTS, TECHNIQUES AND APPLICATIONS OF MOLECULAR PROBES** (June 16-July 27) An intensive course for graduate students, postdoctoral fellows, and established investigators who wish to learn the techniques of molecular biology and their application to physiological and ecological investigations. Lectures and discussions will accompany the laboratories and will focus on the technologies being learned and applications to specific problems in marine ecology. Limited to 24 students. Director: Kenneth H. Nealson, University of Wisconsin.

**MICROBIAL DIVERSITY** (June 16-August 1) An intensive course intended for graduate or postdoctoral students as well as established investigators who desire to become competent in microbiological techniques for working with a broad range of microbes. Limited to 20 students. Co-Directors: Martin Dworkin, University of Minnesota and John Breznak, Michigan State University.

**NEURAL SYSTEMS AND BEHAVIOR** (June 9-August 1) Intended for graduate and postdoctoral students as well as established investigators. The central theme of this course is the neural bases and ontogeny of behaviors. Twenty students participate in intensive laboratories/lectures which combine state-of-the-art neurobiological techniques with behavioral and developmental analyses. Co-Directors: Ronald Calabrese, Emory University and Martha Constantine-Paton, Yale University.

**NEUROBIOLOGY** (June 16-August 17) For 12 pre- and postdoctoral fellows who intend to work in cellular and molecular neurobiology. Postdoctorals and students at an advanced stage of their graduate training are particularly encouraged to apply. The themes will be the functions of neural cells, the molecules involved in these functions, and the organization of molecular components required to generate cellular activity. Director: Irwin Levitan, Brandeis University.

**PHYSIOLOGY: CELLULAR AND MOLECULAR BIOLOGY** (June 16-July 27) For a class of 36 graduate students, postdoctoral fellows and established investigators who desire to learn the methods and research strategies used to study physiology at the cellular and molecular levels. Recent college graduates on their way to graduate school and physicians reentering laboratory research are also encouraged to apply. Interested students may apply for 2 weeks of postcourse research starting July 29. Director: Thomas D. Pollard, Johns Hopkins University.

*Partial financial aid is available to qualified applicants.*

Contact: Florence Dwane,  
Admissions Coordinator,  
Office of Sponsored Programs,  
Marine Biological Laboratory,  
Woods Hole, MA 02543 USA;  
(508) 548-3705, ext. 216

**Application  
Deadline:  
MARCH 1, 1991**

## BE A SCIENCE JOURNALIST FOR A SUMMER!

The American Association for the Advancement of Science (AAAS) invites students in the natural and social sciences and engineering to apply for the 1991 **MASS MEDIA SCIENCE AND ENGINEERING FELLOWS PROGRAM**. Students majoring in English, journalism, or other nontechnical fields are not eligible for these fellowships.

Fellows work as reporters, researchers, production assistants, and script consultants for 10 weeks during the summer at host television and radio stations, newspapers and news magazines across the country. Fellows have an opportunity to (1) observe and participate in the process by which events and ideas become news, (2) increase their understanding of editorial decision making, (3) enhance the media's coverage of science-related issues, and (4) develop skill in conveying to the public a better understanding of and appreciation for science and technology.

Fellows receive a \$350 weekly stipend and have all travel expenses paid. Deadline for receipt of applications is **February 1, 1991**. *Minorities and persons with disabilities are especially encouraged to apply.*

For information and application, write:

**Mass Media Science and Engineering  
Fellows Program  
AAAS  
1333 H Street, NW  
Washington, DC 20005**

## GRADUATE PROGRAM CELL AND MOLECULAR BIOLOGY (MULTI-DEPARTMENTAL)

- GENE REGULATION
- MOLECULAR GENETICS
- DEVELOPMENTAL BIOLOGY
- ONCOGENES AND GROWTH FACTORS
- STRUCTURAL BIOLOGY
- NEUROBIOLOGY
- MOLECULAR VIROLOGY AND IMMUNOLOGY

The Graduate School at BAYLOR COLLEGE OF MEDICINE has recently created a graduate program in **CELL AND MOLECULAR BIOLOGY** stressing basic research in the above areas. Students accepted for studies leading to the Ph.D. degree will receive financial support. For further information contact:

Dr. Savio Woo, Director  
Graduate Program in Cell and Molecular Biology  
Baylor College of Medicine, Room 185A  
One Baylor Plaza  
Houston, Texas 77030  
Phone: (713) 798-6557





### **1991 Summer Institute in Japan for US Graduate Students in Science and Engineering**

The National Science Foundation (NSF) announces an opportunity for 50 select US science and engineering graduate students to gain first-hand experience in a Japanese research environment by spending the summer of 1991 at Japanese research laboratories in Tsukuba Science City.

The goals of the Summer Institute in Japan are to expose US graduate students to Japanese science and engineering in the context of a research laboratory and to initiate personal relationships which will better enable them to collaborate with Japanese counterparts in the future. Those eligible are graduate students (US citizens or nationals) who are enrolled at a US institution in a PhD program or enrolled in an engineering graduate program of which they have completed a year or more.

The 50 graduate students selected for this internship will spend the summer participating in on-going research projects at Japanese government or corporate laboratories in Tsukuba Science City, about 60 km northeast of Tokyo. Thirty-six government research institutions are potential hosts for interns, including such well known laboratories as the Electrotechnical Laboratory, the National Institute of Agrobiological Resources, the National Space Development Agency of Japan, the National Research Institute for Metals, and the University of Tsukuba. It is not yet known which organizations may act as hosts.

In addition, interns will receive intensive Japanese language training and, through lectures, discussions and occasional field trips, gain an understanding of the science and science-policy infrastructure of Japan. Interns in the Summer Institute Program will be in Japan for eight weeks from June 28 to August 24. The NSF will pay travel costs to and from Japan and an allowance of \$2,000. Dormitory accommodation and partial board while in Japan will also be provided.

All application materials for the Summer Institute in Japan must be postmarked by January 15, 1991. NSF welcomes applications from all qualified science and engineering graduate students, and strongly encourages women, minorities and persons with disabilities to apply. Application materials may be obtained from NSF's Japan Programs Office, by sending a post card to:

Japan Programs, Room 1214  
National Science Foundation  
Washington DC 20550

or through electronic mail to:

NSFJinfo@nsf.gov (InterNet) or  
NSFJinfo@NSF (BitNet)

## POSITIONS OPEN

### PHYSIOLOGY OF REPRODUCTION

Beth Israel Hospital, Boston, invites applications for a **RESEARCH POSITION** in the Division of Reproductive Endocrinology. Requirements include a Ph.D., 2 years of postdoctoral training, experience in molecular biology, and a strong potential for the development of an independent research program over a course of 2 years. Teaching responsibilities at Harvard Medical School are limited to supervision of basic science research by M.D. fellows. Applicants must demonstrate willingness to devote effort to previously planned projects as well as development of individual areas of investigation and have capacity to work independently.

Submit curriculum vitae and names, addresses, and telephone numbers of three references to: **Joseph F. Mortola, Department of Obstetrics and Gynecology, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215** by 15 December 1990. *Beth Israel Hospital is an Affirmative Action/Equal Opportunity Employer.*

**RESEARCH POSITION.** Applications are invited for a scientist with 1 to 2 years of experience to lead small, independent research group in the area of molecular/cell biology. Areas of specialization may include (but are not restricted to) cellular structures, molecular genetics, gene expression. The successful candidate will have access to the important departmental facilities and to graduate students and is expected to seek outside funding for research. The level and mode of the nomination will depend on his/her experience and qualifications. Candidates should send curriculum vitae and the names of three references by 31 December 1990 to the: **Chairman of the Department of Molecular Biology, University of Geneva, 30 Quai Ernest-Ansermet, CH-1211 Geneva 4, Switzerland.**

**ORGANIC PHYSICAL CHEMISTS.** Fluorescent probe synthesis. Two positions are available immediately for individuals with wide experience in synthetic organic chemistry and immunochemistry. The research project will involve synthesis and testing of novel fluorescence probes for use in immunochemistry and chemical/clinical sensing. The individuals should have a Ph.D. in organic chemistry, physical chemistry, or a closely related discipline. Experience with fluorescence spectroscopy is highly desirable. Depending upon qualifications, the appointments can be at the **RESEARCH ASSOCIATE OR FACULTY** level (nontenure track). Send curriculum vitae, three letters of recommendation, copies of representative publications, and salary requirements to: **Organic Chemistry Search Committee, c/o Dr. Joseph R. Lakowicz, University of Maryland School of Medicine, Department of Biological Chemistry, 660 West Redwood Street, Baltimore, MD 21201.** Application deadline: 30 November 1990. *Equal Opportunity/Affirmative Action Employer.*

### TOXICOLOGISTS

The California Department of Food and Agriculture seeks staff toxicologists and associate toxicologists in its pesticide regulatory program. Incumbents will evaluate toxicology studies and/or conduct risk assessments. Positions exist for individuals with master's and/or doctorate degrees in toxicology pharmacology or a closely related field with suitable experience in animal toxicology. Salary ranges begin at \$4398 per month for staff toxicologist (minimum: Ph.D. and 3 years of experience) and \$3320 per month for associate toxicologist (minimum: M.S. and 4 years of experience or Ph.D.). Comprehensive benefits package. Continuous testing, oral exam required. Submit résumés to:

Department of Food and Agriculture  
Examinations Unit  
1220 N Street, Room 154  
Sacramento, CA 95814

### VIROLOGIST LIDAK PHARMACEUTICALS

LIDAK has an immediate opening for a Ph.D. or M.D. virologist with experience in animal and tissue culture virology to conduct studies with proprietary anti-viral compounds. The position offers competitive salary and benefits including the opportunity to participate in our stock option program, and the company is located in the heart of the biomedical center in La Jolla, California. Send curriculum vitae with cover letter and three references to: **Dr. David H. Katz, LIDAK Pharmaceuticals, 11077 North Torrey Pines Road, La Jolla, CA 92037.** *LIDAK is an Equal Opportunity Employer.*

## POSITIONS OPEN

**RESEARCH ASSOCIATE.** For university in north-eastern Ohio. To conduct research, using advanced laser technology on the nonlinear optical properties of both pure and mixture liquid crystals and to suggest possible applications of this research for science and industry. Research includes investigation of third-order nonlinear susceptibility of pure liquid crystals and their temperature dependence; and the second-Harmonic Generation study of phase separation kinetics during the curing process of polymer and liquid crystal mixtures. Must have Ph.D. in physics and academic program must have included one course each in: laser physics and technology, laser spectroscopy, surface polaritons, surface studies with lasers, and nonlinear optics. Must be conversant, as evidenced by academic course work and/or publications and/or employer testimonials, with the operation and maintenance of laser systems; infrared laser beam alignment and detection; weak signal detection and processing; nonlinear and surface optics; and the physical and chemical properties of liquid crystals. Forty hours per week, 8:30 a.m. to 5:30 p.m., \$22,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé and course transcript in duplicate (no calls) to: **J. Davies, JO# 1242087, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

## MEETINGS

### SECOND NORTH AMERICAN TANNIN CONFERENCE PLANT POLYPHENOLS: BIOGENESIS, PROPERTIES, AND SIGNIFICANCE

Bringing together scientists from a variety of disciplines that has a common interest in vegetable tannins and related plant phenolic compounds. An international group of speakers has been assembled to give presentations on the biogenesis, structure, chemical properties, and biological or commercial significance of polyphenols. For more information please contact: **Peter Laks, Institute of Wood Research, Michigan Technological University, Houghton, MI 49931.**

## ANNOUNCEMENTS

### PARKINSON RESEARCH GRANTS 1 JUNE 1991 TO 31 MAY 1992

The National Parkinson Foundation, of Miami, Florida, invites the submission of grant proposals for Parkinson research. A total of \$300,000 will be made available to support basic bench research on Parkinson's disease. The award for a single grant will not exceed \$40,000. None of the monies are to be utilized for administrative overhead or travel expenses. The application deadline is 1 February 1991; grant starting date will be 1 June 1991. It is required that proposed studies specifically focus on mechanisms involved in the disease process and that they have the potential of finding the cause and prevention of Parkinson's disease. Scientists entering the field of Parkinson research are encouraged to apply. Proposals will be assessed by the National Parkinson Foundation Scientific Advisory Board. To obtain submission information, please write to:

National Parkinson Foundation, Inc.  
Research Grants  
1501 N.W. 9th Avenue  
Miami, FL 33136

## SITUATIONS WANTED

Broadly trained **CELL BIOLOGIST**, Ph.D. (1980). Seeks faculty or research position out West. Experienced in mouse skin carcinogenesis, wound healing. **Box 124, SCIENCE.**

**CELL BIOLOGY/HISTOLOGY.** TEM/SEM electron microscopy. Medical school anatomy professor/head, EM laboratories, seeks academic/research position, full or part time. Eastern states. Excellent references. **Box 125, SCIENCE.**

**CELLULAR IMMUNOLOGIST**, Ph.D. Extensive experience in HIV-related assays, including CTL and primate work. Seeks position in northern California/Europe. **Box 130, SCIENCE.**

## SITUATIONS WANTED

**IMMUNOLOGIST/MICROBIOLOGIST**, Ph.D. Director of industrial hybridoma/ascites production facility; experience in GMP/GLP documentation, electrophoresis, immunoassay development, immunochemistry, cell culture. **L. Raymond, 521 West Brush Creek Drive, Rogers, AR 72756.** Telephone: 501-636-6405.

**Ph.D./M.B.A.** Experience in cell/molecular biology and business. Seeks managerial position in biotechnology or pharmaceutical firm. **Box 127, SCIENCE.**

**Ph.D. TOXICOLOGY** seeks faculty/scientist position. Two years of postdoctoral training in carcinogenesis mechanisms, DNA damage <sup>32</sup>P-postlabeling, publications. **Box 128, SCIENCE.**

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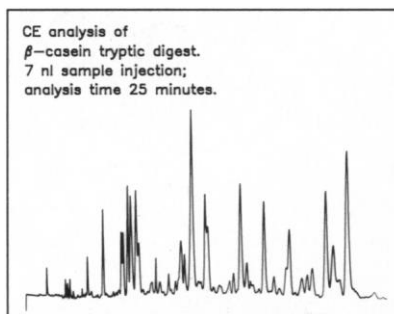
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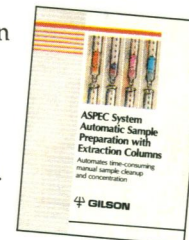
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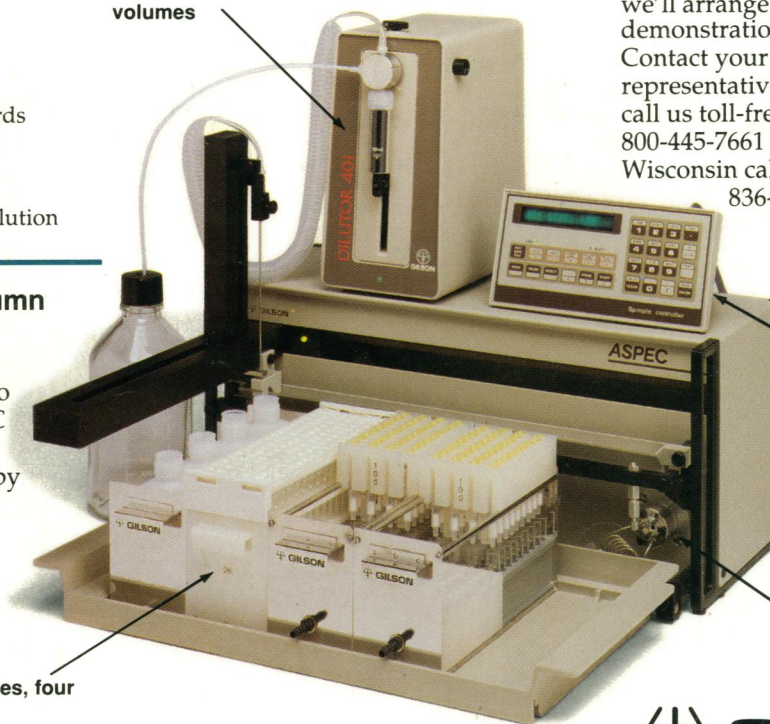
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