

prepared for it. The Report consists of a brief review of each of the five species considered at the workshop, summarizing their distribution and biology, population status, and conservation, with recommendations concerning both research and management. Various appendixes to the Report give details of the workshop itself and reports on various specific topics (effects of dams, sighting methods). The contributed papers are focused on particular species. In keeping with the site of the workshop, *Lipotes vexillifer*, which inhabits the Yangtze River, receives the most extensive treatment, being the subject of 13 papers, all but one by Chinese authors and including detailed accounts of physiology and behavior as well as consideration of conservation issues. Three papers each are devoted to *Inia geoffrensis* (found in the Amazon and Orinoco rivers), *Pontoporia blainvillei* (inhabiting coastal waters of Brazil, Uruguay, and Argentina), and *Platanista* (two species found in the Ganges, Indus, and other rivers of the Indian subcontinent). Two final papers consider issues of platanistoid propagation and review relevant national laws and international agreements. All papers are in English, with abstracts in Chinese.

The *Handbook* volume belongs to a series that is meant to provide useful basic biological information, as distinct from guidance for management. The treatment of the river dolphins is provided by authors many of whom are also contributors to the proceedings volume: Best and Da Silva on *Inia geoffrensis*, Chen Peixun on *Lipotes vexillifer*, Brownell on *Pontoporia blainvillei*, Reeves and Brownell on *Platanista gangetica* and minor, and Marsh *et al.* on *Orcaella brevirostris* (the Irawaddy dolphin, found from the Bay of Bengal to northern Australia).

In the section of the *Handbook* volume devoted to whales (312 pp.) the largest amount of space is given to the sperm whale, in recognition both of its ecological significance and the size of the literature, reflecting its commercial importance. Eight other chapters treat the Arctic white whale and narwhal, the pygmy and dwarf sperm whales (genus *Kogia*), beaked whales of four genera, and bottlenose whales (*Hyperoodon*).

Unlike the proceedings volume, the *Handbook* includes indexes. Neither work gives an overview of the river dolphins as a group or as related to other cetaceans.—K.L.

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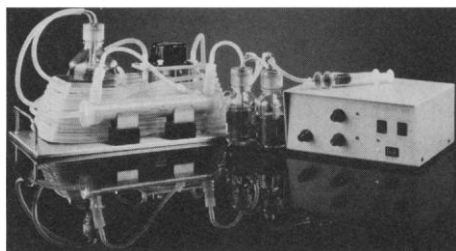
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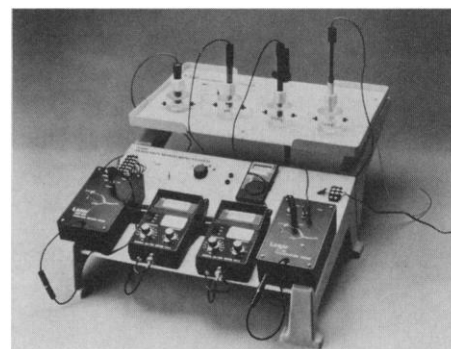
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Structure ad copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are printed in boldface caps and are only 32 characters per line. In ESTIMATING the cost, multiply total lines \times \$40 = approximate cost of ad. For ads to appear after 1 January 1990, multiply total lines \times \$41. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and the resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY:
NOTE: Ad cancellations made after Thursday, TWO weeks prior to issue date incur a 10% production charge. Final deadline for cancellations is 12 p.m. Tuesday, ONE week prior to issue date. Cancellations must be in writing.

Send copy for all **Positions Wanted** ads and **Line Classified** ads less than 1/6 page in size (39 lines) to:

SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005
Telephone: 202-326-6555
FAX: 202-682-0816

Send copy for **Fractional Display** ads, 1/6 page and larger, and all **Marketplace** ads to:

Scherago Associates, Inc.
1515 Broadway
New York, NY 10036
Telephone: 212-730-1050
FAX: 212-382-3725

Blind ad replies should be addressed as follows:

Box (give number)
SCIENCE
1333 H Street, NW
Washington, DC 20005

POSITIONS WANTED

Biochemist/Molecular Biologist, Ph.D. (1982) with extensive research experience in neuroendocrinology and metabolism interested in making a "career adjustment," possibly to area of patent law. Box 228, **SCIENCE**.

Cellular Pharmacologist, Ph.D., 14 years experience directing pharmacology component of an interdisciplinary program for developing potential anticancer drugs at a prestigious research university. Graduate teaching, grants, and publications. Well-developed group leadership abilities and communication skills. Seeking a career change that will combine people-orientation and problem-solving with my research expertise, preferably in a team context. Will consider academic, industrial, private, and government opportunities. Box 224, **SCIENCE**.

POSITIONS WANTED

Food Scientist, R&D, QA, or Production. New Ph.D., cereal chemistry. Resourceful, friendly, persistent. Ronald B. Malouf, 2131 Prairie Field, Manhattan, KS 66502. Telephone: 913-539-0852.

Immunologist, Ph.D. (expected completion December 1989), seeks postdoctoral research position. Industry preferred, will consider academia. Experienced in cell culture, immunization, hybridoma technology, production, screening, and characterization of monoclonal and bispecific antibodies, drug conjugates, protein purification, immunoassays, flow cytometry. Computer literate, recently published. Available early 1990. Box 227, **SCIENCE**.

Medical Mycologist, Ph.D. Teaching and research experience. publications. Areas of interest: *Candida albicans* dimorphism; biochemistry, physiology and epidemiology of medically important fungi. Seeks academic position, preferably in Europe. Write to: Valerio Vidotto, Istituto Malattie Infettive, Università di Torino, Corso Svizzera 164, 10149 Torino, Italy.

Neurophysiologist/Behavioral Neuroscientist. Hispanic. M.D. in Mexico; Ph.D. in Japan; postdoctoral experience in the United States. Seeks long-term position in academia or industry. Productive research on the effects of peptides and other endogenous factors on the nervous system. Experience with rodents and nonhuman primates: intra- and extracellular recording; behavioral techniques; neural transplantation; animal surgery. Twenty English journal articles in last 4 years. Extensive research, clinical, and teaching experience. Box 220, **SCIENCE**.

Pharmacology Ph.D. (1986). Two years of postdoctoral experience in carcinogen DNA adduct detection, RIA and biochemical techniques. Publications and some teaching experience. Seeks suitable position. Box 222, **SCIENCE**.

Ph.D. I have 8 years of experience in the diagnostics industry. I have taken over 20 products from the laboratory bench to the customer's hands; with all that is entailed. My background includes immunology, biochemistry, recombinant DNA, and an entrepreneurial spirit. I'm looking to work with a small number of like minded people who want to help start the next major player in this industry. Box 221, **SCIENCE**.

Ph.D. with strong background in the measurement of circulating hormones and factors by radioimmunoassay, EIA, immunoradiometric assay, HPLC, immunochromatographic and bioassay. Chemical modification of mono- and polyclonal antibodies. Immunoassay development. Synthetic organic chemistry and conjugation of carbohydrate derivatives, peptides, and haptens to proteins and enzymes. NMR, GC, and mass spectrometry, Phospholipid and arachidonic acid metabolism. Box 219, **SCIENCE**.

Ph.D. Molecular Biology. Have experience in enzyme purification and characterization, 2 years of postdoctoral experience in recombinant DNA techniques, construction of DNA library, cloning and characterization of genes, DNA sequencing, transfection of cell lines. Seeking position in industry or academia. Box 225, **SCIENCE**.

Ph.D. Pharmacology (1986). Cardiovascular research. Experienced in animal surgery, hemodynamic studies in small and large animals, in vitro techniques, RIA, and thin-layer chromatography. Several publications, some teaching experience. Seeks suitable position. Box 223, **SCIENCE**.

Research Physician, M.D. (aerospace medicine), 35 years old, Indian, enthusiastic, 3 years of postdoctoral experience. Trained in epidemiology, worked in crew work load, exercise, and altitude decompression sickness projects. Currently NASA-NRC research fellow on extravehicular activity profiles. Excellent references and scientific papers. Seeks challenging position in aerospace/cancer research. Willing to learn new techniques, can relocate. Box 226, **SCIENCE**.

POSITIONS OPEN

ACID RAIN MONITORING PROJECT/RESEARCH SCIENTIST. The Acid Rain Monitoring Project seeks a research scientist to manage and statistically analyze a quality-controlled chemical database on 3700 surface waters. Expertise in dBase, SAS, programming; master's degree or Ph.D. in limnology or related field. Responsibilities include operation of ARC/INFO facility, research and writing. Hiring salary range: \$24,000 to \$32,500 (normal starting range: \$24,400 to \$28,400). Send curriculum vitae and three references by 17 November 1989 to: **Dr. Paul J. Godfrey, Water Resources Research Center, Blaisdell House, University of Massachusetts, Amherst, MA 01003.** The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

ANIMAL ECOLOGISTS PHYSIOLOGICAL ECOLOGISTS

Colby College invites applications from animal ecologists and physiological ecologists for a tenure-track position as **ASSISTANT PROFESSOR** of biology. The successful candidate will become part of a well-established and growing program in ecology and environmental science and expand this program at the interface between ecology and physiology. Candidates should have a Ph.D., a strong commitment to teaching undergraduates, broad training in the biological sciences, and special interests and training in the physiological aspects of animal ecology. Special interests in invertebrate biology, familiarity with liberal arts colleges, teaching experience and/or postdoctoral training are desirable. Responsibilities will include teaching courses in ecology/environmental science and in the successful candidate's areas of specialization. An active research program including supervision of undergraduate research is expected.

Submit letter of application, statement of teaching and research interests, curriculum vitae, reprints of publications, undergraduate and graduate transcripts, and three letters from individuals familiar with the applicant's teaching and/or research to: **Professor Arthur K. Champlin, Chair, Department of Biology, Colby College, Waterville, ME 04901.** Applications should be complete by 15 December 1989. *Colby College is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minorities.*

ANIMAL ECOLOGIST/ PHYSIOLOGICAL ECOLOGIST

Seaver College, the undergraduate liberal arts college of Pepperdine University, seeks applicants for tenure-track position (**ASSISTANT PROFESSOR** level) in animal ecology beginning September 1990, Ph.D. required. Faculty member will teach one-semester course in general ecology, upper-division courses in specialty, and sections of biology for nonmajors. Preference given applicants who are strong teachers with desire to develop undergraduate research program. Send résumé to: **Dr. Norman Hughes, Natural Science Division, Pepperdine University, Malibu, CA 90263.** Pepperdine is an independent, Christian university controlled by self-perpetuating Board of Regents and maintains relationship with Churches of Christ. *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR VERTEBRATE PHYSIOLOGY

Tenure-track. Department of 40 faculty, 125 graduate and 125 undergraduate students has strong research and teaching interests in wildlife and fishery biology, ecology, behavior, chemical ecology, biotechnology, and toxicology. Must have a Ph.D., a record of achievement in research, and commitment to education at the graduate and undergraduate levels. Must teach a course in vertebrate physiology, a course in own area of expertise (vertebrate histology desirable), and contribute to graduate seminars and instructional programs. Must develop strong research program, advise undergraduate, M.S. and Ph.D. students, and assume faculty responsibilities at department and college levels. Academic year appointment starts 1 September 1990. Salary based on training/experience. Send letter of application, résumé, transcripts, and three letters of recommendation by 1 December 1989 to: **Dr. D. Müller-Schwarze, State University of New York, College of Environmental Science and Forestry, Syracuse, NY 13210.**

SUNY-CESF is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANALYTICAL CHEMIST

To work in hypertension research program. Applicant must have experience with protein purification and characterization, HPLC-EC analysis of catecholamines and metabolites, and molecular biology techniques, and in the supervision of laboratory personnel. Beginning salary \$20,000 to \$25,000. Send curriculum vitae to: **Hypertension Program of the Division of Cardiovascular Diseases, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294, Attention: Donna Cline. An Equal Opportunity/Affirmative Action Employer.**

AQUATIC TOXICOLOGIST CLEMSON UNIVERSITY SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION

Applications are invited for a tenure-track appointment (70% research, 30% teaching) at the **ASSISTANT/ASSOCIATE PROFESSOR** level effective on or after 1 January 1990. Development of a research program in biochemical toxicology, participation in a team-taught introductory course in aquatic toxicology, and development of an advanced course in aquatic toxicology are expected. Experience in mesocosm studies is desirable. The research component of this appointment will be with the Institute of Wildlife and Environmental Toxicology which is located on the campus. Salary will be commensurate with experience. Send letter of interest and curriculum vitae by 1 December 1989 to: **Dr. Joseph R. Tomasso, Department of Aquaculture, Fisheries and Wildlife, G08 Lehotsky Hall, Clemson University, Clemson, SC 29634-0362. Clemson University is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT CURATOR IN HERPETOLOGY AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Herpetology and Ichthyology invites applications for a tenure-track curatorial position. The prime requisite is vigorous collection-based research in systematics of Recent amphibians and reptiles with preference for a field-oriented specialist on tropical amphibians, lizards, or snakes. Must have a commitment to collection growth and curation, and be willing to assume administrative, education, and exhibition responsibilities as appropriate.

Salary will be commensurate with qualifications and experience. The successful applicant must have completed all requirements for the Ph.D. by time of appointment. Applicants should submit by 15 January 1990: a letter of application with a brief statement of research objectives, curriculum vitae, complete bibliography, and names, addresses and telephone numbers of at least five references. Submit to:

**Dr. Charles W. Myers, Chairman
Herpetology Search Committee
American Museum of Natural History
Central Park West at 79th Street
New York, NY 10024-5192**

An Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR NEUROBIOLOGY

Faculty position (tenure-track) available in the Neuroscience Research Unit of the Department of Psychiatry, University of Vermont (UVM) College of Medicine. Applications from qualified Ph.D.'s with strong research credentials in molecular biology and biochemistry in fields related to the neurosciences. Successful candidates will complement existing research programs which include receptor regulation and transmembrane signaling mechanisms in brain and in neuronal cells in primary culture. Rank and salary commensurate with experience. Send curriculum vitae, representative reprints, statement of future research directions, and names and addresses of three references to: **R. H. Lenox, M.D., Director, Neuroscience Research Unit, Department of Psychiatry, UVM College of Medicine, Burlington, VT 05405. Applications will be accepted until position is filled. UVM is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSITIONS OPEN

A position is available in macromolecular structure determination using crystallography or NMR at **ASSISTANT TO FULL PROFESSOR** level; entry level applicants are encouraged. Appointment is through the Institute of Molecular Biology in the Departments of Chemistry and Biology. NMR facility and the multiwire area x-ray diffractometer facility are available for use. Please send résumé with research proposal and have three letters of recommendation sent to: **R. H. Kretsinger, Chair, Search Committee, Department of Biology, University of Virginia, Charlottesville, VA 22901. Equal Opportunity/Affirmative Action Employer.**

Applications are invited for two tenure-track positions available for September 1990. The positions are at the **ASSISTANT PROFESSOR** level. We are particularly interested in candidates who specialize in

- a synthetic and experimental approach to the study of vertebrate reproductive biology
- molecular biology of the nervous system and behavior, with strong developmental and/or genetic components

Please submit curriculum vitae (including biographic data), short statement of research objectives, names of at least five referees, and selected reprints to: **The Chairman, Department of Zoology, University of Texas, Austin, TX 78712-1064, before 1 January 1990.**

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

The Department of Microbiology, University of British Columbia invites applications from molecular immunologists for an **ASSISTANT PROFESSOR** level, tenure-track position. The individual we seek will have a Ph.D. postdoctoral experience, a strong research record, and show potential for developing an internationally recognized research program which will complement ongoing programs in immunology, virology, and bacterial pathogenesis. Salary will be commensurate with qualifications and experience. The successful candidate will be expected to participate in the department's large and expanding Ph.D. program. *In accordance with Canadian immigration requirements priority will be given to Canadian citizens and permanent residents of Canada.* Closing date for applications is 28 February 1990. Position will be available 1 July 1990. The position is subject to final budgetary approval. Please send curriculum vitae, a summary of research interests, and the names of three referees to: **The Head, Department of Microbiology, University of British Columbia, #300 6174 University Boulevard, Vancouver, BC V6T 1W5, Canada. The University of British Columbia is committed to the federal government's employment equity program and encourages applications from all qualified individuals.**

The Department of Physical Education at the University of California, Berkeley, is seeking to fill **TWO TENURE-TRACK POSITIONS**, effective fall of 1990, one at the senior and one at the junior level, in the areas defined below. Salary for each will be commensurate with qualifications. Appointees will be expected to establish and maintain independent research programs in her/his area of specialty. Applicants must have Ph.D. or M.D. degree and relevant postdoctoral training or comparable experience.

MUSCLE BIOMECHANICS: Mechanisms of neuro-muscular or musculo-skeletal responses and adaptations to exercise. Emphases on the control and regulation of muscular and skeletal function.

CARDIOVASCULAR/ENVIRONMENTAL PHYSIOLOGY: Cardiac metabolism or cardiovascular regulation in relation to exercise; human physiological responses to environmental conditions and exercise. Ability to participate in direction of UCB Fitness Evaluation Program preferred.

Application procedures: Submit letter of application, current curriculum vitae, and names of five references by 15 January 1990 to:

**Professor Roberta J. Park, Chair
Department of Physical Education
200 Hearst Gymnasium
University of California
Berkeley, CA 94720**

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

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR BIOLOGY

We invite applications for a tenure-track position in the Rosenstiel Center and Department of Biochemistry at Brandeis University. Preference will be given to those who investigate fundamental mechanisms, especially in the area of transcription or replication. Applications for a more senior position will also be considered. Please send your curriculum vitae, three letters of recommendation, and a description of your research accomplishments and plans to: **Dr. Pieter Wensink, Search Committee, Rosenstiel Basic Medical Sciences Research Center, Brandeis University, Waltham, MA 02254-9110. The deadline for application is 10 January 1990. Brandeis University is an Equal Opportunity/Affirmative Action Employer.**

The Department of Internal Medicine and the Cardiology Division at the University of Texas Medical School at Houston wishes to recruit an **ASSISTANT PROFESSOR** of medicine on the tenure track who will help develop clinical and basic research and service efforts in interventional cardiology. The candidate should have extensive previous training in percutaneous coronary artery angioplasty, both clinically and in relevant research models. The successful applicant should also be interested in developing laser and coronary artery atherectomy methods in the treatment of patients with coronary heart disease. Educational requirements are an M.D. degree, clinical training in internal medicine and cardiology, either Board-certified or Board-eligible, extensive clinical experience with coronary artery angioplasty and other aspects of interventional cardiology and experience in relevant animal models in the evaluation of mechanisms responsible for restenosis after coronary artery angioplasty. At least 1 year of experience as a teacher and clinical investigator on a cardiology faculty involved in these clinical and research efforts is required. The salary range is \$100,000 to \$120,000. Applications, including curriculum vitae, bibliography, research interests, and names of three references should be sent to:

**James T. Willerson, M.D.
Professor and Chairman**

**Department of Internal Medicine
The University of Texas Health Science Center
at Houston
6431 Fannin Street
Houston, TX 77030**

The University of Texas Health Science Center at Houston is an Affirmative Action/Equal Opportunity Employer.

CANCER RESEARCH, INSTRUCTOR/ASSISTANT PROFESSOR. Tenure-track position for Ph.D. with experience in signal transduction and growth factors. Application deadline 30 November 1989. Contact: **Abdel H. Ragab, M.D., Division of Hematology/Oncology, Department of Pediatrics, Emory University School of Medicine, 2040 Ridgewood Drive, Atlanta, GA 30322. Equal Opportunity Employer/M/F.**

PHYSICAL SCIENCE—To teach courses addressing physics and calculus and to contribute to areas of current interest such as appropriate technology, design, global systems, and computer arts.

MARINE ECOLOGY/ICHTHYOLOGY—To teach courses addressing marine ecology, ichthyology, limnology, fisheries, and biological oceanography and to contribute to areas of current interest such as marine and coastal studies, evolutionary ecology, and resource management.

BOTANY—To develop a program in applied biology through teaching courses addressing plant physiological ecology, plant-animal interactions, horticulture, and soil biology; to contribute to current interests in sustainable agriculture and global food issues.

College of the Atlantic is a small, private, non-departmental college offering a Bachelor of Arts in human ecology. We emphasize interdisciplinary study, self-governance, team-teaching, and curricular innovation.

All are continuing, full-time positions to begin fall of 1990. Doctorate and teaching experience are preferred. Preference may be given to applications received by 7 December 1989. Send application, curriculum vitae, and three letters of reference to:

**Cindie Marinelli
Box SC
College of the Atlantic
Bar Harbor, ME 04609**

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOLOGY UNIVERSITY OF ILLINOIS

The Department of Biochemistry at the University of Illinois invites applications for a tenure-track faculty position which will be available starting in August 1990. Salary is dependent upon qualifications. Candidates must have demonstrated exceptional research ability in dynamic areas of biochemistry or molecular biology, and must be prepared to establish an independent research program and to contribute to graduate and undergraduate teaching programs. A Ph.D. and postdoctoral experience in biochemistry or a related field are required. For full consideration, applicants should submit curriculum vitae, a brief description of their research interests, and three letters of reference by 1 January 1990, to: **Professor Richard I. Gumpert, Chairman, The Biochemistry Search Committee, Department of Biochemistry, University of Illinois, 1209 West California Street, Urbana, IL 61801. Telephone: 217-333-2013.**

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

The Division of Cell and Development Biology of the Department of Molecular and Cell Biology of the University of California, Berkeley, invites application for an **ASSISTANT PROFESSOR** to be effective July 1990 (pending budgetary approval). Persons with interests in cellular interactions, intercellular messengers, cell-matrix interactions, and/or molecular bases of cell excitation are appropriate for the position. The new faculty member is expected to contribute to teaching in cell biology and carry out excellent research. Interested persons should apply by submitting curriculum vitae, names of three references, and a statement of research and teaching interests prior to 9 December 1989. Please send materials to: **299 LSA, University of California, Berkeley, CA 94710.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR

The Biophysics and Cell Physiology Division of the Department of Molecular and Cell Biology invites applications for a tenure-track faculty position at the assistant professor level, the appointment to begin in the 1990-91 academic year, pending budgetary approval. Formed during the recent reorganization of the biological sciences at Berkeley, this new department contains 92 faculty in six divisions.

Applicants should hold a Ph.D. degree, or equivalent, and have had significant research experience in one of the following areas: computation by systems of real neurons, the study of intercellular messengers in nerve cells, or structural molecular biophysics. Candidates should have a demonstrated experimental ability and a strong theoretical background. The duties of this position include: continuing important research, supervision of graduate students and postdoctoral fellows, and innovative course design and teaching at the undergraduate and graduate levels. Applications should include a letter specifying qualifications and current research interests, curriculum vitae, a list of scientific publications with representative reprints, and the names and addresses of four persons from whom we may request letters of recommendation. Applications must arrive no later than 15 January 1990 and should be addressed to: **Professor W. Geoffrey Owen, Head, Division of Biophysics and Cell Physiology, Department of Molecular and Cell Biology, 102 Donner Laboratory, University of California, Berkeley, CA 94720.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. The Department of Radiation Oncology and Biophysics of the Eastern Virginia Medical School is recruiting a qualified individual with interests in quantitative histopathology and image analysis. The successful candidate will have demonstrated the ability to carry out productive independent research and be able to contribute to ongoing programs involving flow cytometry, nuclear morphometry, and biochemical markers in human cancer specimens. A strong background in pathology is essential. Applicants should send their curriculum vitae, outline of research plans, and three letters of reference to: **Dr. James Shaeffer, Department of Radiation Oncology and Biophysics, Eastern Virginia Medical School, 600 Gresham Drive, Norfolk, VA 23507.** *An Equal Opportunity Employer. Minorities and females are encouraged to apply.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF TOXICOLOGY. Tenure-track position in risk assessment of xenobiotics used in agriculture and industry. The position is 60% extension and 40% research. Applicants should submit curriculum vitae, reprints of publications, and a brief statement of career goals and qualifications to: **Ernest Hodgson, Department of Toxicology, Box 7633, North Carolina State University, Raleigh, NC 27695** by 1 January 1990. *North Carolina State University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR

Physiologist position requires doctorate with research experience, ability to teach mammalian or human physiology course, develop courses in area of specialty and conduct research, etc. Send curriculum vitae with publication list, unofficial transcripts, a summary of teaching and research, and have three letters of recommendation submitted by 1 January 1990 to: **Reed P. Warren, Ph.D., Chairman, Search Committee, Biology Department, Utah State University, Logan, UT 84322-6895.**

USU is an Affirmative Action/Equal Opportunity IRCA Employer.

The Department of Psychology, University of North Carolina at Chapel Hill, expects two tenure-track **ASSISTANT PROFESSOR** positions in the experimental and biological psychology program effective 1 July 1990. Duties would include teaching and research training at the undergraduate and graduate levels; candidates with research interests in learning and memory and in behavioral pharmacology are especially encouraged to apply. Résumé, statement of research interests, two representative publications, and four letters of recommendation should be sent by 15 December 1989 to: **Paul G. Shinkman, Director, Experimental and Biological Psychology Program, CB#3270, University of North Carolina, Chapel Hill, NC 27599-3270.** *An Affirmative Action/Equal Opportunity Employer.*

GEORGETOWN UNIVERSITY TENURE-TRACK APPOINTMENT BIOCHEMISTRY/MOLECULAR BIOLOGY

The Department of Biology, Georgetown University, invites applications for an **ASSISTANT PROFESSOR-SHIP**, effective fall 1990. The appointee will be expected to teach an undergraduate core course in biochemistry each spring semester and a graduate course of his/her choosing in an area of biochemistry or molecular biology each fall semester. We seek a promising scientist pursuing significant research in an area of biochemistry or molecular biology. Three letters of recommendation, curriculum vitae, and a description of research interests should be submitted by 1 February 1990 to: **Dr. David Nishioka, Chair, Biochemistry Search Committee, Department of Biology, Georgetown University, Washington, DC 20057.** *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

The Department of Internal Medicine and the Cardiology Division at the University of Texas Medical School at Houston wishes to recruit an **ASSISTANT PROFESSOR** of medicine working on the tenure track who is well trained in molecular biology, to develop a basic science research laboratory in cardiovascular medicine/molecular biology, for the study of cellular gap junction proteins, and membrane and intracellular calcium binding proteins. Educational requirements include an M.D. degree, training in internal medicine and cardiology, either Board-certified or Board-eligible, and molecular biology training in cardiovascular medicine in the general area of lipids or membrane proteins. At least 2 years of experience on a cardiology faculty, working in the same general areas, is required. The salary range will be \$100,000 to \$120,000. Applications, including curriculum vitae, bibliography, research interests, and names of three references should be sent to:

**James T. Willerson, M.D.
Professor and Chairman
Department of Internal Medicine
The University of Texas Health Science Center
at Houston
6431 Fannin Street
Houston, TX 77030**

The University of Texas Health Science Center at Houston is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

The University of Scranton, a Jesuit university in northeastern Pennsylvania, is offering a tenure-track position, at the rank of **ASSISTANT PROFESSOR**, for a virologist/molecular biologist, starting September 1990. Candidate should have a strong commitment to teaching undergraduate students. The successful candidate will be expected to conduct research and teach general biology and virology. Ph.D. required.

Send curriculum vitae and three letters of recommendation to: **Dr. Vito G. DelVecchio, Department of Biology, University of Scranton, Scranton, PA 18510-2192.**

The University of Scranton is an Affirmative Action/Equal Opportunity Employer and Educator.

ASSISTANT PROFESSOR—Physiological Psychology/Behavioral Neuroscience. A regular, tenure-track appointment at the assistant professor level beginning September 1990. Candidates must be able to establish a strong research program and also be committed to quality undergraduate and graduate instruction. Supervision of both graduate and undergraduate research is expected. Preference will be given to candidates who combine strength in animal learning and learning theory with their strength in neuroscience. Teaching responsibilities will include an undergraduate laboratory course in animal learning. Send a letter of application and curriculum vitae and arrange to have at least three letters of recommendation sent by 15 January 1990, to: **Robert N. Leaton, Chair, Physiological Search Committee, Department of Psychology, Dartmouth College, Hanover, NH 03755.**

ASSISTANT PROFESSOR CARDIAC-VASCULAR PHARMACOLOGY

Applications are invited from individuals with the Ph.D. and/or M.D. degrees and strong postdoctoral accomplishments in cardiac or vascular research for a tenure-track position at the assistant professor level. The successful candidate will be expected to establish an independent, extramurally funded research program utilizing molecular, cellular, organ, and/or whole animal models, and contribute to the teaching programs. Opportunities exist for interfacing with ongoing projects in cardiac and endothelial pharmacology and pathophysiology. Approximately half of the 16-member faculty have interests in the cardiac or vascular area. Competitive salary, laboratory space, and start-up funds are available. Interested individuals should forward detailed curriculum vitae, a letter describing professional goals, and the names of three referees to: **Dr. R. W. Caldwell, Chairman, Department of Pharmacology and Toxicology, Medical College of Georgia, Augusta, GA 30912-2300,** by 1 January 1990. *The Medical College of Georgia is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSORS MOLECULAR GENETICS BIOCHEMISTRY

The College of William and Mary invites applications for two tenure-track faculty positions: one each in molecular genetics (Biology Department) and biochemistry (Chemistry Department). These permanent positions are made possible by a grant from the Howard Hughes Medical Institute. Successful applicants will receive start-up funds and will share a full-time technician for 3 years. They will be expected to maintain active research programs through extramural funding. A commitment to excellence in teaching is essential; individuals will be expected to develop and teach courses and laboratories in their respective areas of expertise. The Ph.D. is required; postdoctoral experience is highly desirable. The application must include curriculum vitae with publication list, a statement of teaching and research goals, transcripts, and three letters of reference. Applications from molecular geneticists should be sent to: **Bruce Grant, Chair, Molecular Genetics Search Committee, Department of Biology.** Those from biochemists should be addressed to: **Richard Kiefer, Chair, Biochemistry Search Committee, Department of Chemistry.** Both are at **The College of William and Mary, Williamsburg, VA 23185.** Reviews of applications will begin 30 November 1989 and will continue until the positions are filled. *The College of William and Mary is an Affirmative Action/Equal Opportunity Employer which welcomes and encourages applications from women and minorities.*

STATE UNIVERSITY OF NEW YORK AT BUFFALO BIOLOGICAL SCIENCES—FACULTY OPENINGS

TWO ASSISTANT PROFESSORSHIPS: We anticipate hiring two faculty for Fall 1990. Those appointed will be individuals whose research programs are in the forefront of their fields and who will be able to interact with other members of our faculty.

These positions are open to candidates who will be utilizing modern biochemical, molecular and/or structural approaches in the study of biological problems in areas such as the following: (a) **the immune system** at the molecular and/or cellular level, (b) **development**, or (c) regulation of **gene expression**.

Successful candidates will be expected to have at least two to three years of post-doctoral experience, demonstrate experience in a productive research program, be able to describe in detail plans for future research activities, and show promise for establishing a fundable independent research program.

Candidates will also be expected to demonstrate above average teaching ability for both undergraduate and graduate teaching. **Salary will be nationally competitive; excellent laboratory space and equipment available.**

To apply, candidates must submit a curriculum vitae, including a statement of research background and teaching experience, and at least **three letters of reference**, to **Dr. Darrell Doyle, Chairman, Department of Biological Sciences, 109 Cooke Hall, State University of New York at Buffalo, NY 14260**. Applications will be received until December 31, 1989, or until the positions are filled thereafter.

State University of New York is an Affirmative Action/Equal Opportunity Employer.

SCIENTISTS

Bioreactor/Monoclonal Antibodies

Roche Diagnostic Systems, a subsidiary of world-renowned Hoffmann-La Roche Inc., is a leader in the development, manufacture and marketing of analytical systems and *in vitro* diagnostics for hospitals, clinical laboratories and Physicians. We are seeking Scientists at various levels to become involved with both the generation of monoclonal antibodies and the evaluation of bioreactor systems for the production of monoclonal antibodies, leading to the selection and transfer of a system to Production.

The ideal candidates will have a Master's or PhD in a biological science, along with a minimum of three years of involvement with mammalian cell cultures, especially as related to hybridomas, including the use of bioreactors to produce antibodies. Knowledge of immunology and related techniques is required. The ability to function independently and good written communication skills are necessary.

We offer a competitive salary commensurate with your background, along with a generous benefits package. Principals only, for consideration, please send your resume, indicating salary history and requirements (those without this information will not be acknowledged), to: **Mr. John G. Nathan, Staffing and Employee Services, Department EF, Hoffmann-La Roche Inc., Nutley, New Jersey 07110**. We are an equal opportunity employer.

Roche Diagnostic Systems



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Join American Cyanamid's Agricultural Revolution

With the launch of 17 new products in the last four years, we're revolutionizing agriculture in more than 85 countries around the world. We've done this by committing our scientific minds and resources to discovering ways of increasing global crop and livestock production through chemical, biochemical and biological research. To take part in this agricultural revolution, join our Agricultural Research Division in our newly expanded Princeton, NJ facility.

RESEARCH BIOLOGISTS

Molecular Biology and Immunology

Working on a dynamic multidisciplinary team of molecular biologists, immunologists and parasitologists, you'll create innovative applications to improve animal performance and health. This will include developing an independent research program and publishing work in both refereed journals and patent literature.

We require a Ph.D. in Molecular Biology, Immunology or a related discipline, significant post-doctoral work experience and the ambition to broaden your scientific achievements and expertise. (Dept. SC11/3-1)

BIOLOGIST

Working in our molecular genetics group, you will assist a group of scientists using model genetic systems to study problems in receptor biology, infectious disease and animal physiology. All efforts are geared to discovering innovative agricultural products by applying contemporary molecular genetic approaches.

We require experience in molecular biology, and an MS degree or a BS degree with laboratory experience in molecular genetics of a microbial organism, preferably *S. cerevisiae*. Also preferred are a background in classical genetics and receptor biology/biochemistry/pharmacology. (Dept. SC11/3-2)

We offer an excellent compensation and benefits package including a 401k savings plan, flex-time schedules and a convenient location one hour from New York City and Philadelphia. To join the agricultural revolution at American Cyanamid, send your resume and salary requirements quoting relevant Dept. # to: Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08540. An Equal Opportunity Employer.



THE COMMITMENT GROWS EVERY DAY.

POSITIONS OPEN

The Department of Mathematics seeks qualified applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level in mathematical biology starting 21 August 1990. There will be start-up funds available for each successful applicant. We will begin the interview process 15 January 1990. Applications should be sent to: **Howard A. Levine, Chair, Department of Mathematics, Iowa State University, Ames, IA 50011. Women and minorities are encouraged to apply. Iowa State University is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR. The Department of Physiology, Texas College of Osteopathic Medicine, invites applications for a tenure-track position. Applicants must have two or more years postdoctoral training in myocardial metabolism and be capable of establishing an independent, externally funded research program in this area. Responsibilities include medical and graduate student instruction. Submit letter of application stating career goals, curriculum vitae, and three letters of recommendation to: **H. Fred Downey, Ph.D., Chairman Search Committee, Department of Physiology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107. Deadline for applications: 10 December 1989.**

The Texas College of Osteopathic Medicine is an Equal Opportunity/Affirmative Action Employer.

The University of Texas Health Science Center at Houston Medical School, Department of Internal Medicine, Division of Hematology/Oncology, seeks two full-time faculty members at the **ASSISTANT OR ASSOCIATE PROFESSOR** level with clinical training in internal medicine and hematology with strong interests in basic or clinical research, preferably in area of vascular or bone marrow biology. Successful candidates will have excellent research support and will be expected to develop strong research programs. The research environment and facility are excellent for research interactions and collaborations. Salary is competitive commensurate. Please send curriculum vitae with biography to: **Kenneth K. Wu, M.D., Professor and Director, Division of Hematology/Oncology, University of Texas Health Science Center Medical School, P.O. Box 20708, Houston, TX 77030. The UTHSC-H is an Equal Opportunity Employer. Women and minorities are encouraged to apply.**

ASSISTANT/ASSOCIATE PROFESSOR MEDICAL COLLEGE OF OHIO

The Department of Surgery, Medical College of Ohio, is searching for a G.I. (preferably hepatic) physiologist. Tenure-track position with opportunity for independent research program. Address inquiries (please include curriculum vitae) to: **Neil R. Thomford, M.D., Chairman, Department of Surgery, Medical College of Ohio, P.O. Box 10008, Toledo, OH 43699-0008. The Medical College of Ohio is an Equal Opportunity Employer.**

ASSISTANT OR ASSOCIATE PROFESSOR to join active, metabolically oriented Department of Physiology. Candidate for this tenure-track position is expected to have current research funding, adequate space, including tissue culture facilities, available. Research interest in obesity or in bone metabolism preferable. Send curriculum vitae to: **John J. Spitzer, M.D., Professor and Head, Department of Physiology, Louisiana State University Medical Center 1901 Perdido Street, New Orleans, LA 70112. LSU-MC is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT/ASSOCIATE PROFESSOR OF MICROBIOLOGY. Tenure-track, fish and shellfish disease position. Candidate will conduct research on fish and shellfish diseases, develop an independent research program, work collaboratively within the university and with industry and public agencies, and contribute to instructional programs and graduate education. Will be appointed to Coastal Oregon Marine Experiment Station, Newport, with academic appointment in Department of Microbiology. Contact: **Dr. Robert E. Olson, Search Committee Chairman, Oregon State University, Hatfield Marine Science Center, Newport, OR 97365. Deadline: 30 November 1989. Oregon State University is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR, BACTERIOLOGY/RHIZOSPHERE BIOLOGY. The University of Arizona invites applicants for a tenure-track assistant or associate professor position with research (75%) and teaching (25%) responsibilities. The appointee is expected to develop a creative research program on the influence of soil-inhabiting bacteria on plant health; the specific area of research is unrestricted. This position is one of several devoted to building a strong research group focusing on elucidating the basic mechanisms of how microorganisms influence plant growth and development through their direct or indirect effects on plant roots and/or other organisms in the rhizosphere. Deadline is 31 January 1990 or until suitable candidate is found. Submit a letter of application stating career goals, reprints, résumé, and have four letters of recommendation sent to: **H. D. VanEtten, Department of Plant Pathology, Forbes 104, University of Arizona, Tucson, AZ 85721. Telephone: 602-621-9355. An Affirmative Action/Equal Opportunity Employer.**

ASSISTANT OR ASSOCIATE PROFESSOR OF ANATOMY. The Department of Anatomy, The Ohio State University, is seeking exceptional candidates to fill a tenure-track position in cell biology. Applicants should have a Ph.D. or M.D. degree and a minimum of 2 years of postdoctoral experience. A successful candidate must have a strong record of scientific accomplishments and the ability to develop an independent research program. The department presently has an interactive group of cell biologists interested in synaptogenesis, receptor localization, cellular communication, molecular development, and immunobiology. Preference will be given to candidates with research expertise in the use of molecular and/or cellular approaches in their research. Additional responsibilities include contributions to team teaching efforts in professional and graduate education. Curriculum vitae, brief statement of research interests, and three letters of recommendation should be sent by 8 January 1990 to: **James S. King, Ph.D., Professor and Chairman, The Ohio State University, Department of Anatomy, 4072 Graves Hall, 333 West Tenth Avenue, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Minority candidates and women are encouraged to apply.**

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGICAL SCIENCES

The Department of Biological Sciences at Wright State University invites applications for a tenure-track assistant or associate professor starting fall 1990. We will consider all areas of research specialization, but are especially interested in developmental/cellular/molecular biology of phenomena such as toxicology or hormonal action and receptors in plants. The successful candidate must have an earned Ph.D. Research responsibilities will include developing an active research program and directing graduate students. Primary teaching responsibilities will include courses in introductory biology and the candidate's area of expertise. The department offers the M.S. degree and participates in an interdisciplinary Ph.D. program in the biomedical sciences. The department consists of 21 faculty, 300 undergraduate majors, and 30 M.S. and Ph.D. students. Please submit curriculum vitae, a description of proposed research projects, recent reprints, and three letters of recommendation to: **Randy Moore, Department of Biological Sciences, Wright State University, Dayton, OH 45435 by 1 December 1989. Wright State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.**

The Department of Pathology, Medical College of Georgia, Augusta, Georgia, invites applications for a tenure-track faculty position at the rank of **ASSOCIATE PROFESSOR OR PROFESSOR.** The applicant should have a M.D. or Ph.D. degree with training and experience in molecular biology, molecular genetics, and/or immunopathology. In addition to participation in the graduate and undergraduate educational programs, the successful candidate will establish an independent or collaborative extramurally funded research program. Applicants should submit detailed curriculum vitae, names and telephone numbers of three references, and a statement of personal and professional goals to: **R. N. Rao, M.D., Chief, Section of Anatomic Pathology, Medical College of Georgia, Augusta, GA 30912-3605. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR EVOLUTIONARY/POPULATION GENETICS

Tenure-track position open September 1990 for an evolutionary or population geneticist. Postdoctoral experience desirable. Expected to develop a productive research program and interact with strong marine ecology and molecular genetics groups in the department. Application of molecular methodology to field populations is of particular interest. Generous start-up funding and other allowances negotiable. Graduate and undergraduate teaching responsibilities. Send résumé and publications. Three or more reference letters from professional associates requested. Application deadline 1 December 1989 to: **Dr. Sarah Woodin, Chair, Population Genetics Search Committee, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208. Telephone: 803-777-5084.**

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ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY AND TOXICOLOGY

The Department of Pharmacology and Toxicology at the University of Maryland School of Pharmacy is seeking applicants for a tenure-track faculty position. Ideal candidate should have primary interests in pharmacology or toxicology with research experience in the areas of molecular pharmacology, molecular biology, immunopharmacology, or biochemical pharmacology. Laboratory space and start-up funds will be provided. Applicants should submit curriculum vitae, a summary of research interests and future plans, and the names of three references before 24 December 1989 to:

**Esam E. El-Fakahany, Ph.D.
Chairman of Search Committee
Department of Pharmacology and Toxicology
University of Maryland School of Pharmacy
20 North Pine Street
Baltimore, MD 21201**

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

ASSISTANT/ASSOCIATE PROFESSOR ANATOMY AND CELL BIOLOGY

The Department of Anatomy and Cell Biology, State University of New York, Health Science Center, Syracuse, invites applications for a tenure-track position at the assistant or associate professorial level. Applicants should have a Ph.D. or M.D. degree and a minimum of 2 years of postdoctoral research experience. The department is seeking an individual with a strong record of scientific achievement and capable of attracting extramural funding. Teaching opportunities will exist in medical and/or graduate courses. Although the specific area of research is not as important as excellence, preference will be given to candidates using modern approaches in cellular and molecular biology. The position provides a very competitive salary as well as generous set-up funds.

Individuals interested in being considered for this position should send a copy of their curriculum vitae, recent reprints, and the names of three references by 15 March 1990 to: **Dr. Larry F. Lemanski, Professor and Chairman, Department of Anatomy and Cell Biology, State University of New York, Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. The State University of New York, Syracuse, is an Equal Opportunity/Affirmative Action Employer.**

ASSOCIATE DIRECTOR OKLAHOMA AGRICULTURAL EXPERIMENT STATION OKLAHOMA STATE UNIVERSITY

Applications are invited for the associate director of the Oklahoma Agricultural Experiment Station. The successful candidate is expected to provide program leadership and assist the dean and director of the division of agriculture with the administration of the Oklahoma Agricultural Experiment Station. Individuals wishing to apply should submit a letter of application, transcripts, and a professional résumé with names, addresses, and telephone numbers of five references by 15 December 1989 to: **Dr. James Osborn, Chairman, Search and Screen Committee, Room 308, Agricultural Hall, Oklahoma State University, Stillwater, OK 74078. Telephone: 405-744-6161.**

Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.

**CHAIRPERSON
DEPARTMENT OF
MOLECULAR BIOLOGY
UNIVERSITY OF MEDICINE AND DENTISTRY
OF NEW JERSEY
SCHOOL OF OSTEOPATHIC MEDICINE**

The Department of Molecular Biology of the University of Medicine and Dentistry of New Jersey, School of Osteopathic Medicine is seeking applications and nominations of distinguished academic scientists qualified to serve as the founding Departmental Chairperson. The new Department consists of eight faculty and is expected to grow to fifteen faculty under the leadership of its new Chairperson. The present faculty are young and vigorous and encompass research programs in muscle protein biochemistry, cellular DNA repair processes, cell motility and insulin action. The Department will have responsibility for the instruction of medical students in the disciplines of Biochemistry, Microbiology, Genetics and Pharmacology.

We are seeking candidates who have an outstanding record of research achievements, who are dedicated to educational programs of high quality and who have administrative experience. Although we are seeking individuals with research interests in any area of modern molecular biology, we are particularly emphasizing recruitment of individuals with research interests in mechanisms of oncogene expression, control of growth factor receptors, and molecular immunology. Appointment will be made at the Professor level with a starting date as early as April 1, 1990 and no later than July 1, 1990.

Letters of application, curriculum vitae, and the names, addresses and telephone numbers of four references should be submitted to: **Dr. Richard Schimmel, Acting Assistant Dean for Basic Sciences, Department of Physiology, UMDNJ-SOM, (S), 675 Hoes Lane, Piscataway, NJ 08854-5635.**

The UMDNJ is an Affirmative Action/
Equal Employment Opportunity Employer M/F/H/V.



**Search Announced
Associate Provost and Associate
Director for Academic Affairs
Carter Center of Emory University**

The Carter Center of Emory University, an international, interdisciplinary, non-partisan institute combining study and analysis with the practical applications of scholarship, focuses its program activity on such fundamental issues as conflict resolution, human rights, agriculture, health, and governance within specific world regions (Africa, Latin America, the Middle East, the Soviet Union and the United States). The Center is a division of Emory University, equal in standing to the professional schools of the University. At its core are distinguished fellows and research associates who collaborate with one another and with President Jimmy Carter.

The position of Associate Provost and Associate Director for Academic Affairs is a newly established senior position at the Center, a dual appointment between the Carter Center and the University. The incumbent will provide academic leadership within the Center, will coordinate Center with University programs, and will contribute to the University's growing emphasis on international programs.

Candidates should have an earned doctorate, a distinguished scholarly record appropriate to a senior faculty rank at Emory University, and significant administrative experience within a university or other non-profit setting.

Nominations and applications should be sent to the Carter Center Search Committee, Office of the Provost, Emory University, Atlanta, Georgia 30322. Letters of application will be held in strict confidence and should include a statement of interest, a curriculum vitae, and a list of three referees. The Committee will begin screening applications on November 1, 1989, and continue until the position is filled. References will be contacted directly by the Committee after November 1, upon notification of applicants.

Emory University is an equal opportunity employer.

**PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES
RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709**

DEVELOPMENTAL TOXICOLOGIST

The Division of Toxicology Research and Testing of the National Institute of Environmental Health Sciences, Research Triangle Park, NC, has a permanent position for a Developmental Toxicologist with a salary range of \$41,121 to \$63,172.

The successful candidate will be expected to:

1. Conduct original research in the area of developmental toxicology (develop new test protocols and investigate the site and mechanism of action of developmental toxicants using techniques of cellular and molecular biology).
2. Serve as Project Officer for extramural contract(s) in Developmental Toxicity Testing.
3. Provide expert consultation to the Program in matters involving developmental toxicology/teratology.

Candidates are required to have the following:

1. Ph.D. degree or its equivalent in toxicology, pharmacology, anatomy, physiology or other allied subject where training was focused on developmental biology/toxicology.
2. Five or more years of postdoctoral research experience in developmental biology/teratology/toxicology.
3. Strong interest in developing a research program which utilizes techniques of cellular and molecular biology to impact the area of developmental toxicology.
4. Broad knowledge of developmental toxicology/teratology which will aid in the interpretation of testing data.
5. Ability to communicate effectively both orally and in writing.
6. Relevant publications in related scientific journals.

U.S. citizenship required. Applicants must be found to be eligible on a Civil Service Register.

For additional information contact Johnny McLean or Lisa Fletcher at (919) 541-7513. To apply, send curriculum vitae and the names of three references by December 1, 1989 to:

**Johnny McLean (Code HNVII)
NIEHS Personnel Office
P.O. Box 12233
Research Triangle Park, NC 27709**



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BIOCHEMISTS

Work on The Research & Development Of New Pharmaceutical Products

WALLACE LABORATORIES is the ethical pharmaceutical division of Carter-Wallace, Inc. We currently have two exceptional growth positions available in our Department of Biochemistry.

BIOCHEMIST

Supervising technician staff, you'll be responsible for planning/performing biochemical experiments in the areas of drug metabolism, record all tests and experiments and participate in the analysis and interpretation of results. The ideal successful candidate will possess a relevant BS or MS Degree and experience in the pharmaceutical industry. A proven ability to work with lab automation and computers, plus background with radioisotopes and the various methods and instruments used in biochemistry and enzymology would be a plus.

ASSOCIATE BIOCHEMIST

Duties will include laboratory scale synthesis of radioactive/stable isotope labelled compounds and potential analogs and metabolites in new drug development including isolation, purification and identification. To qualify, you must possess a BS Degree and two or more years' experience... or an MS in Organic Chemistry with experience in multi-step synthesis or medicinal chemistry. Experience in the purification of organic compounds by HPLC, column chromatography and their characterization by TLC, NMR, MS, etc. is essential. Background in handling air-sensitive compounds would be a plus.

Join a company with a tradition of developing top quality products. We offer a competitive starting salary and excellent benefits. For immediate consideration, send your resume with salary history to: **Keith I. Jones, Employment Manager, CARTER-WALLACE, INC., P.O. Box 1001, Half Acre Road, Cranbury, NJ 08512-0181.** Equal Opportunity Employer M/F

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We're Anaquest, a division of the BOC GROUP and a recognized leader in the development and manufacture of specialized pharmaceutical products. Our position of leadership in our field and continued growth has resulted in an outstanding opportunity for a Cardiovascular Research Group Leader.

The candidate we seek for this key position will be responsible for managing Bachelor's and Master's level Scientists in several anesthesia related areas. In addition you will assess hemodynamic and respiratory effects of anesthesia/acute care related drugs. A Ph.D in Pharmacology or other life science and a minimum of 3 years of post-doctoral or industrial experience is desired. Experience with *in vivo* systems is preferred.

In return, Anaquest offers a competitive compensation package that includes an excellent salary and comprehensive benefits, as well as a highly professional work environment and a unique opportunity for growth. For immediate confidential consideration, please send your resume to: **Human Resources, Box CR, Anaquest, 100 Mountain Avenue, Murray Hill, NJ 07974.** We are an equal opportunity employer M/F/H/V.

Anaquest



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DIRECTOR

CENTER OF ALCOHOL STUDIES

Rutgers, the State University of New Jersey, invites nominations and applications for the Director of the Center of Alcohol Studies on the New Brunswick campus.

The center is an educational and research unit, providing instructional programs and conducting research and training programs. It maintains one of the largest libraries on alcohol and publishes the Journal of Studies on Alcohol. The center is committed to the development of a neurosciences research program. A major construction project is under way. Candidates must possess an outstanding scholarly record, and demonstrated administrative and leadership abilities. Please address all correspondence to:

Dr. Barbara S. McCrady
Search Committee Chair
c/o Office of the Vice President
for University Administration and
Personnel
Rutgers, The State University of
New Jersey
New Brunswick, NJ 08903

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS

An Affirmative Action/Equal Opportunity Employer

FACULTY POSITION MOLECULAR BIOLOGIST



MICROBIOLOGY, UCLA

The Department of Microbiology, College of Letters and Science, University of California, Los Angeles has a tenure-track position available for a molecular biologist. The primary areas of recruitment interest are, 1) molecular genetics of yeast, 2) molecular aspects of archaeobacteria. A Ph.D. or equivalent as well as several years of post-doctoral experience in microbiology, molecular biology, or a related field is required, with evidence of research accomplishments and teaching abilities. The individual selected will be expected to establish a strong research program as well as participate in undergraduate and graduate student teaching. Title and salary (nationally competitive) are commensurate with qualifications and experience with preference for an entry level position. Applicants should send a curriculum vitae, summary of research interest, relevant publications, and the names and addresses of three references to Dr. Virginia L. Miller, Dept. of Microbiology, UCLA, 405 Hilgard Ave., Los Angeles, CA, 90024. Deadline for applications is December 15th, 1989. UCLA is an equal opportunity employer—women and minorities are encouraged to apply.

Product Development Specialist

Nalge Company, leading producer of plastic products for academic, research and industrial laboratories, is seeking a person to fill an opening in our product development area.

Generating, evaluating and developing concepts into marketable labware products are primary responsibilities; technical support of internal personnel and customers also included. 3-5 years' experience in a research or industrial laboratory required, experience in a technically related position also acceptable. Good communication skills, both oral and written, a must. Project management experience helpful; degree in Biology, Microbiology or Biochemistry desired.

Excellent compensation and benefits package offered. Qualified candidates submit resume in confidence to:

**Personnel Department
NALGE COMPANY
P.O. Box 20365
Rochester, NY 14602**

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THE FUTURE OF SEARLE BEGINS WITH YOU.

The future of healthcare begins with research. And Searle, a world-wide leader in the pharmaceutical industry, has an exceptional opportunity for a Senior Director of CNS Diseases Research to help chart our course into the nineties.

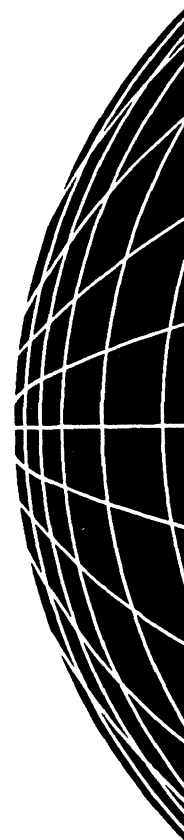
The skilled professional we seek must be an established neuroscientist with a very broad background and one who is a recognized leader in their field. A Ph.D or M.D. and 5-10 years of CNS research experience is required. Also required is an extensive publication record and experience with managing large research efforts of 30 or more scientists. Previous pharmaceutical industry experience is preferred.

The Senior Director will be responsible for building, organizing and managing the CNS Diseases Research Department of Searle to help move the company toward its goals. Interaction with other Searle groups, external consultants and collaborative groups is also a function of this highly visible position.

The future of Searle begins with research. And you. For consideration, please send your resume, in confidence, to: **Searle, Human Resources, Dept. RS1, 4901 Searle Parkway, Skokie, IL 60077.** An Equal Opportunity Employer M/F/H.

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**The University of Virginia
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Immunology Research**

Endowed Chair in Immunology

The University of Virginia is seeking an outstanding scientist to provide intellectual leadership for the Beirne Carter Center for Immunology Research. The Center is an interdepartmental program with the overall goal of fostering and coordinating research and research training in immunology. The Center is newly formed as the result of a gift from a University alumnus. Research will focus on the fundamental mechanisms underlying the induction and regulation of immune responses.

Funds are available to recruit scientists to fill several faculty positions. Candidates or those wishing to nominate outstanding individuals should direct their communications to:

Rodney L. Biltonen
Pharmacology Department
Box 448, Health Sciences Center
University of Virginia
School of Medicine
Charlottesville, VA 22908

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Scientists

GenPharm International is excellently positioned to become a leader in the exciting field of transgenic biotechnology. With exclusive technology, top scientific advisors, close interaction with leading academic researchers and stable funding - we're poised to do breakthrough work in pharmaceutical, agricultural and nutritional applications.

A Ph.D is required. At least two years' postdoctoral experience is preferred.

Cell Biology

You will be involved with primary cell culture and gene transfer with an emphasis on the development of transgenic animals using embryonic stem cells and/or somatic cell mediated gene therapy.

Molecular Biology

Your responsibilities include gene expression in mammalian cells, preferably in transgenic animals, and/or homologous recombination selection techniques.

Transgenesis

You will work with transgenic animal techniques and the subsequent analysis of these animals. In addition to the above requirements, concurrent interest in immunology is desirable.

Be a part of our dynamic team, with scientific challenges, a chance to work in our new mid-Peninsula facility, and excellent compensation and benefits including a stock option program. Qualified candidates are invited to forward a C.V. to Leslie Flint, GenPharm International, 180 Kimball Way, South San Francisco, CA 94080. We are an equal opportunity employer.

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR STRUCTURAL BIOLOGY

Two tenure-track faculty positions in a new interdisciplinary program between the Departments of Biological Science and Chemistry. Supported by excellent core facilities in NMR, laser spectroscopy, electron microscopy, computing, cell culture, and polypeptide/polynucleotide sequencing and synthesis. Demonstrated abilities in research and teaching essential. Appointment may be in either department. One position is in high resolution NMR spectroscopy applied to biological macromolecules, one in protein/peptide structure in relation to biological activity. Send curriculum vitae, brief description of research interests and plans, and three letters of recommendation to: **Dr. T. P. Williams, Institute of Molecular Biophysics, Florida State University, Tallahassee, FL 32306-3015** by 4 December 1989.

Florida State University is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE DEAN RESEARCH AND GRADUATE STUDIES. The School of Medicine at West Virginia University (WVU) invites applications for the position of Associate Dean for Research and Graduate Studies. Qualifications include the Ph.D., M.D., or equivalent degree and extensive research experience. Applicants must have achievements in attracting extramural funding for research and in sustaining viable research programs. Experience in advanced education, guidance of graduate students, and a record of successful cooperative research endeavors are important characteristics. Excellent interpersonal, written, and oral communications skills are essential. The desired candidate must have demonstrated leadership abilities and is expected to satisfy professorial rank and tenure requirements suitable for academic faculty appointment. Applications are due 30 November 1989. Submit a current curriculum vitae and three letters of recommendation to: **William W. Fleming, Ph.D., Chair, Search Committee for the Associate Dean for Research and Graduate Studies, WVU School of Medicine, Morgantown, WV 26506.** *Affirmative Action/Equal Opportunity Employer.*

ATMOSPHERIC SCIENTIST

Tenure-track position as **ASSISTANT PROFESSOR** in the Institute for Environmental Studies, an interdisciplinary unit of the University of Illinois at Urbana-Champaign (UIUC). Appointment at higher rank possible for qualified applicants. Ph.D. degree and demonstrated potential both for teaching (at undergraduate and graduate levels) and research required. Research area: atmospheric chemistry of physics of environmental importance; e.g., ozone depletion, global warming, air quality, acid deposition, or others. A joint appointment in an appropriate disciplinary department is anticipated and interdisciplinary interactions with social and natural scientists within the institute and in other university and state units are possible. Salary commensurate with qualifications. Successful candidates will be expected to take part in research, teaching, and public service activities of the institute. Send curriculum vitae, statement of research goals, and three letters of reference to: **Richard Larson, Chairman, Atmospheric Scientist Search Committee, Institute for Environmental Studies, UIUC, 1005 Western Avenue, Urbana, IL 61801.** Position is available now and will remain open until filled; to receive full consideration, applications should be submitted by 1 December 1989.

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

BIOLOGIST. The Biology Department of William Jewell College invites applications for a tenure-track **ASSISTANT/ASSOCIATE PROFESSORSHIP** in biology beginning fall 1990. The applicant should have a broad background in biology with expertise in physiology. A Ph.D. is required, as is a strong commitment to teaching and directing undergraduate research. *Women and minorities are strongly encouraged to apply.* Address letters of application by 30 November 1989 to: **Dr. Judith Dilts, Chairman, Department of Biology, William Jewell College, Liberty, MO 64068. Telephone: 816-781-7700, ext. 5661.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

BIOLOGY, TENURE-TRACK POSITION

Ph.D. with experience in introductory biology; some combination of botany/genetics/molecular biology desired. Strong commitment to undergraduate teaching, advising, and research. Salary and rank negotiable. Send curriculum vitae, transcripts, three letters of reference, and a one-page statement on the role of biology in a liberal arts education to: **Dr. Bradley Bowden, Division of Biology, Alfred University, Alfred, NY 14802,** by 31 December 1989. *Affirmative Action/Equal Opportunity Employer.*

BIOLOGICAL OCEANOGRAPHER

The Department of Organismic and Evolutionary Biology and the Committee on Oceanography at Harvard University seek to make an appointment in biological oceanography at the rank of **ASSISTANT PROFESSOR.** Preference will be given to candidates with interests in phytoplankton processes. In addition to research interests in oceanography, the applicants should be prepared to teach oceanography at the undergraduate and graduate levels and in the area of phyecology at the introductory level. Applicants should send curriculum vitae, statement of research interests, and the names of three references to: **James J. McCarthy, Chairman, Search Committee for Biological Oceanographer, MCZ, Harvard University, Cambridge, MA 02138.** *Harvard University is an Affirmative Action/Equal Opportunity Employer.*

BIOCHEMIST

DNA Plant Technology Corporation is the world's largest independent agriculture biotechnology company. We are expanding our research to manipulate plant secondary metabolism for protein isolation and characterization from either microbes or plants and biochemical analysis of the resulting plants. Requires Ph.D. Send résumé to: **DNA Plant Technology Corporation, Dean Gallinatti, 6701 San Pablo Avenue, Oakland, CA 94608-1239.** *An Equal Opportunity Employer.*

BIOCHEMISTRY CHAIR UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

This notice is an announcement to potential candidates for the Chair in Biochemistry at the University of Arkansas for Medical Sciences, Little Rock, Arkansas. This position is open to candidates holding the M.D. or Ph.D. degree who would also qualify for a tenured appointment as Professor of Biochemistry.

Any individual interested in being considered for this position should send his or her curriculum vitae to: **Dr. T. E. Andreoli, Chairman, Biochemistry Search Committee, Department of Internal Medicine, 4301 West Markham, Slot 640, Little Rock, Arkansas 72205.** Application deadline is 1 January 1990. *The University of Arkansas for Medical Sciences is an Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTS/MOLECULAR BIOLOGISTS UNIVERSITY OF CALIFORNIA BERKELEY

The Biochemistry and Molecular Biology Division of the Department of Molecular and Cell Biology of the University of California, Berkeley, invites applications for two positions. We seek candidates whose research emphasis is in the isolation and characterization of molecules that participate in key cellular and viral processes such as: the cell division cycle, regulation of RNA maturation, stress responses, or complex protein or membrane assembly. We prefer to fill these two positions with one person having an emphasis on biochemical studies of regulation and another having a structural focus. The positions would be at the level of **ASSISTANT PROFESSOR** and could begin as early as fall of 1990. Candidates ought to have demonstrated excellence, originality, and productivity in research and have a strong interest in teaching. Applicants should submit curriculum vitae, a bibliography, a two-page outline of research objectives, a summary of teaching interests, copies of two representative publications, and names of three references to: **New Staff Committee, Division of Biochemistry and Molecular Biology, 401 Barker Hall, University of California, Berkeley, CA 94720.** Applications should be received prior to 15 February 1990. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOCHEMICAL TOXICOLOGY. Postdoctoral associate. Position available immediately at the **Whitney Marine Research Laboratory of the University of Florida, St. Augustine,** for a Ph.D. in biochemistry, chemistry, or a related area. Research will focus on the bioavailability and biotransformation of procarcinogens, and DNA/macromolecule binding of metabolites in marine fish and crustacea. The position is initially for 1 year with the possibility of renewal. Please send curriculum vitae with the names of three references to: **Dr. M. O. James, Department of Medicinal Chemistry, Box J485, University of Florida, Gainesville, FL 32610.**

BIOCHEMIST. Tenure-track, assistant professor position in an ACS-approved six-person department. Ph.D. required. Responsibilities include teaching biochemistry and participation in the introductory and advanced chemistry courses. New teaching/research facility. Saint Mary's College is a Catholic college for women which emphasizes the liberal arts and seeks faculty supportive of its mission. *Applications from minority candidates are particularly encouraged.* Résumé, transcripts, three letters of reference, and a one- to two-page summary of teaching and research objectives should be sent by 1 December 1989 to: **Dr. Philip Bays, Department of Chemistry, Saint Mary's College, Notre Dame, IN 46556.** *An Equal Opportunity Employer.*

PROFESSOR OF BIOCHEMISTRY AND CHAIR DEPARTMENT OF BIOCHEMISTRY SCHOOL OF MEDICINE EAST CAROLINA UNIVERSITY

Nominations and applications are invited for the position of professor and chairperson of the Department of Biochemistry at the East Carolina University School of Medicine. The department is responsible for the education of medical and graduate students and consists of nine tenured or tenure-track faculty. The department is well funded and well equipped. We are seeking candidates with an outstanding record of achievement in any field of biochemistry or molecular biology to provide strong leadership to an excellent department. Candidates should have a doctorate in biochemistry or a related discipline, experience in an academic medical center, and a record of scientific excellence. Candidates should submit a curriculum vitae and the names of addresses of three references to: **Dr. Wallace R. Wooles, Chairman, Biochemistry Search Committee, Department of Pharmacology, East Carolina University School of Medicine, Greenville, NC 27858.** Applications should be received by 1 February 1990. *East Carolina University is an Equal Opportunity Employer and encourages the application of women and minorities.*

BIOCHEMISTRY AND PHYSICAL CHEMISTRY/INORGANIC CHEMISTRY. The Chemistry Department of Williams College anticipates authorization, and invites applications, for two tenure-track positions at the **ASSISTANT PROFESSOR** level for fall 1990. Candidates should have a Ph.D. (postdoctoral experience is preferred) and a strong commitment to teaching at the undergraduate level and developing a productive research program. The initial teaching assignments for the biochemist will largely be courses in biochemistry and for the physical/inorganic chemist will include basic physical chemistry and quantum chemistry. Additional assignments for both will be from other courses in the curriculum consistent with the individual's background and interests and the needs of the department. A semester teaching load normally includes complete responsibility for one course, including laboratory sections, and supervision of student research projects. Appointment at a senior level is possible under special circumstances. Williams College is a highly selective, coeducational liberal arts institution of approximately 236 faculty and 1950 undergraduates, located in northwestern Massachusetts. The Chemistry Department, with nine faculty members and 25 to 35 majors each year, is accredited by the ACS and has excellent facilities for teaching and research. Send résumé, undergraduate and graduate transcripts, description of research projects for undergraduates, and three letters of recommendation to: **Dr. Lawrence J. Kaplan, Chairman, Department of Chemistry, Williams College, Williamstown, MA 01267** by 30 December 1989. *Equal Opportunity/Affirmative Action Employer. We are especially interested in identifying minority and women candidates.*

Procter & Gamble's UNIVERSITY EXPLORATORY RESEARCH PROGRAM

—10th Year—

Ten years ago Procter & Gamble began a unique program for funding academic research—the University Exploratory Research Program. This Program solicits proposals in the biological and physical sciences of mutual interest to university scientists and P&G's research staff. Each year three awards are made to newly appointed faculty or established investigators who wish to explore new areas of study. Each award is for a maximum of \$50,000 per year over a period not to exceed three years. The response to this Program has been very great and has of necessity required that the review process be highly selective. This is a complete list of awardees and their current affiliations:

John T. Lis, Section of Biochemistry, Molecular & Cell Biology, Cornell University, 1981

Bruce I. Reisch and John C. Sanford, Department of Horticultural Sciences, N.Y.S. Agricultural Experiment Station, Cornell University, 1981

David R. Tyler, Department of Chemistry, University of Oregon, 1981

Devon W. Meek (deceased), Department of Chemistry, Ohio State University, 1982

John C. Wheeler, Department of Chemistry, University of California, San Diego, 1982

George L. Wilcox, Department of Pharmacology, University of Minnesota, 1982

Jeffrey J. Collins, Glaxco, Inc., Research Triangle Park, North Carolina, 1983

Paul B. Hopkins, Department of Chemistry, University of Washington, 1983

Carl O. Pabo, Department of Molecular Biology and Genetics, Johns Hopkins School of Medicine, 1983

Anthony G. M. Barrett, Department of Chemistry, Northwestern University, 1984

Paul W. Bohn, Department of Chemistry, University of Illinois at Urbana-Champaign, 1984

Hyuk Yu, Department of Chemistry and **George Zografi**, School of Pharmacy, University of Wisconsin-Madison, 1984

Steve Granick, Department of Materials Science & Engineering, University of Illinois at Urbana-Champaign, 1985

Jonathan Sessler, Department of Chemistry, University of Texas at Austin, 1985

Lawrence R. Stanberry, Children's Hospital Medical Center, University of Cincinnati, 1985

Scott E. Denmark, Department of Chemistry, University of Illinois at Urbana-Champaign, 1986

Alice P. Gast, Department of Chemical Engineering, Stanford University, 1986

Bernard E. Weissman, School of Medicine, University of North Carolina, 1986

Martin Caffrey, Department of Chemistry, Ohio State University, 1987

Steven Rokita, Department of Chemistry, SUNY at Stony Brook, 1987

Peter Schultz, Department of Chemistry, University of California, Berkeley, 1987

Mark D. Bednarski, Department of Chemistry, University of California, Berkeley, 1988

Stanley Fields, Department of Microbiology, SUNY at Stony Brook, 1988

Anne Walter, Department of Physiology & Biophysics, Wright State University, 1988

Peter T. Lansbury, Jr., Department of Chemistry, Mass. Inst. of Technology, 1989

Rebecca J. Morris and Susan M. Fischer, M.D., Anderson Cancer Center, University of Texas, 1989

Annette Shine, Department of Chemical Engineering, University of Delaware, 1989

The deadline for this year's applications is January 1, 1990. For additional information write:



Administrator,
University Exploratory Research Program
Miami Valley Laboratories
The Procter & Gamble Company
P.O. Box 398707
Cincinnati, OH 45239-8707

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) SCHOOL OF MEDICINE BIOLOGICAL CHEMISTRY

The Department of Biological Chemistry is recruiting at the level of **ASSISTANT PROFESSOR** (tenure track) for 1990–1991. We are seeking outstanding candidates with research interests in any area of molecular, cellular, or developmental biochemistry. Applicants should submit curriculum vitae, a one-page summary of research plans, and names of three references to:

Dr. James Paulson
Chair, Search Committee
Department of Biological Chemistry
UCLA School of Medicine
Los Angeles, CA 90024-1737

The University of California is an Equal Opportunity Employer. Applications from women and members of minority groups are encouraged.

BIOLOGY FACULTY POSITIONS. Two tenure-track faculty positions will be available in September 1990. We seek a **COMPARATIVE PHYSIOLOGIST** and an **EVOLUTIONARY/BEHAVIORAL BIOLOGIST**. Teaching duties include introductory and advanced courses in the above areas, a junior seminar, and participation in Allegheny's Liberal Studies program. Additional expertise that we require, but may be fulfilled by either or both positions, is the ability to teach biostatistics and comparative anatomy. In addition to teaching, establishment of a research program and direction of student research projects is expected. Substantial start-up and research support is available. We are seeking individuals with demonstrated excellence in both teaching and research, as well as a strong commitment to liberal arts education. Send curriculum vitae, statements of teaching and research interests, three reference letters, and graduate transcripts to: **Dr. Glen Wurst, Chair, Biology Department, Allegheny College, Meadville, PA 16335.** Review of credentials will begin 11 December 1989. *Equal Opportunity Employer.*

BIOMOLECULAR NMR SPECIALIST FACULTY OPENING IN BIOCHEMISTRY UNIVERSITY OF ILLINOIS

The Department of Biochemistry at the University of Illinois is seeking applicants for a faculty position to be filled by a researcher specializing in the study of biological macromolecules by high-resolution NMR spectroscopy. The position, which can be at a level of **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR**, will be available starting August 1990.

The successful applicant must have demonstrated excellence in research, and must exhibit exceptional potential for establishing or have already established an independent research program. The university and the department will make a substantial commitment in equipment and funds to assist the new staff member in building a research program.

Candidates will also be judged on their ability to participate effectively in the teaching program of the department. The teaching assignment for the academic year is a one-semester lecture or laboratory course at the advanced undergraduate-graduate level. The starting salary is competitive and dependent upon the experience and qualifications of the applicant. The Department of Biochemistry has 15 full-time faculty members and 5 faculty members from allied areas serving with joint appointments. There are approximately 130 doctoral students, 30 postdoctoral fellows, and 200 undergraduate biochemistry majors in the department.

Applications and requests for further information should be directed to: **Professor Robert B. Gennis, Chairman, The Biochemistry Search Committee, Department of Biochemistry, University of Illinois, Box 15 Noyes Laboratory, 505 South Mathews Street, Urbana, IL 61801.** Telephone: 217-333-9075.

Applicants should submit curriculum vitae, with a list of publications and a brief description of future research plans, and should have letters of recommendation from three qualified scientists sent to the search committee. Completed applications should be received by 1 January 1990, in order to receive full consideration.

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

POSITIONS OPEN

BIOCHEMISTRY, Ph.D. Either a postdoctoral position for a recent graduate or a research scientist position for a more experienced candidate is immediately available. Expertise desired in purification and characterization of specific glycoproteins for which a sensitive assay is available. Ability to obtain antibodies for blot and other immunochemical analysis and for quantitation purposes with evolution toward application of molecular biological techniques. Salary negotiable depending upon background. Send curriculum vitae and three references to: **R. Thomas Holzbach, G.I. Research Unit, Research Institute, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195-5218.** *An Equal Opportunity/Affirmative Action Employer.*

CARDIOVASCULAR PHYSIOLOGIST

Contract funded position for cardiovascular physiologist to support the research and development of the totally implantable electric ventricular assist device (EVAD) program is being sought. Duties: The physiologist in collaboration with the engineering group will be responsible for developing the integration and control of the EVAD with the natural heart. These studies will involve simulations, in vitro studies, animal studies, and finally clinical application. Coronary circulation during cardiac assist and perfusion of peripheral organs will be examined. Qualifications: Doctoral degree specializing in physiology with 2 to 3 years of postdoctoral experience in a relevant field. Evidence of potential for becoming an independent investigator candidate possessing demonstrated competence in the fields of cardiovascular regulation monitoring and regional blood flow measurements in large animals would be particularly preferred. Candidates are required to submit curriculum vitae and references to: **Dr. G. Adams, EVAD Program Manager, University of Ottawa Heart Institute, Room H560, 1053 Carling Avenue, Ottawa, Ontario K1Y 4E9, Canada.**

CELLULAR BIOLOGIST with working knowledge of immunology. The Stephen F. Austin State University Department of Biology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. A Ph.D. with a strong background in cellular biology and immunology is required. Duties include teaching immunology and introductory biology. Modest research, publications, and participation in master's program expected. Salary commensurate with training and experience. Review of applications will begin immediately, with a deadline of 9 December 1989 or until position is filled. Applicants should submit application form, curriculum vitae, transcripts, three letters of recommendation, and a brief statement of teaching philosophy and career objectives to: **Dr. Don A. Hay, Chairman, Department of Biology, Box 13003 SFA, Nacogdoches, TX 75962.** *An Equal Opportunity/Affirmative Action Employer.*

CHEMISTRY AND PHYSICS UNIVERSITY OF NEW ENGLAND

The Department of Life Sciences invites applications for two positions in chemistry and one in physics. Positions are at the **ASSISTANT PROFESSOR** level and are tenure track.

Qualifications for all positions include a Ph.D., as well as interest/experience in teaching undergraduate majors in medical biology, marine biology, environmental sciences, and allied health sciences. Qualifications for one of the chemistry positions includes expertise in analytical chemistry.

The Department of Life Sciences is implementing major innovative curriculum changes emphasizing integration of general education goals and course content, interdisciplinarity, collaborative learning, and broad awareness of environmental and other social and global issues, as well as skills in critical thinking, experiential learning, leadership, and communication. We seek individuals who are strongly motivated to contribute to these curricular changes.

Submit résumé and statement of teaching goals/philosophy by 1 December 1989 to: **Michael Miles, Director of Personnel, University of New England, Biddeford, ME 04005.** *The University of New England is an Equal Opportunity/Affirmative Action Employer and especially invites applications from qualified women and minorities.*

POSITIONS OPEN

CHAIRPERSON, DEPARTMENT OF PHARMACOLOGY. The College of Medicine, Albert B. Chandler Medical Center, of the University of Kentucky, is searching for an individual strongly committed to academic preeminence to provide professional and academic leadership for the educational and research programs of the Department of Pharmacology. The department has a long tradition of excellence in research and education, with particular emphasis in neuropharmacology. The University is committed to excellence and has developed Commonwealth Centers of Excellence in related areas of science that enhance the academic environment. Please reply before the receipt deadline of 30 November 1989 with curriculum vitae and a list of at least three references to: **John T. Slevin, M.D., Chair, Search Committee for Chair of Pharmacology, Department of Neurology, University of Kentucky College of Medicine, Lexington, KY 40536-0084.** *The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.*

CHEMICAL PALEOBIOLOGY OR QUANTITATIVE GEOMORPHOLOGY. The Department of Geology, University of North Carolina—Chapel Hill, invites applications for a tenure-track, **ASSISTANT PROFESSOR** position (senior appointment possible for exceptional candidate with appropriate experience). Research interest either: (i) chemical paleobiology (e.g., trace element/isotope geochemistry, paleoclimatic modeling, biogeochemistry) or (ii) quantitative geomorphology (e.g., sediment transport processes, fluvial fluid dynamics, geohydrology). Appointment effective 1 July 1990.

The successful applicant will initiate and maintain funded research, teach graduate and undergraduate courses, and supervise theses.

Submit names and addresses of four references, current curriculum vitae, and statement of research interests to: **Dr. P. G. Feiss, Chairman, Mitchell Hall CB# 3315, University of North Carolina, Chapel Hill, NC 27599.** Complete applications by 15 December 1989.

The University of North Carolina—Chapel Hill is an Equal Opportunity/Affirmative Action Employer.

COMPARATIVE PHYSIOLOGIST. The Department of Biology at San Diego State University (SDSU) invites applications for a tenure-track faculty position at the **ASSISTANT, ASSOCIATE OR FULL PROFESSOR** level. Specific research expertise may be with any taxonomic group(s) and at any level of organization, but should complement present faculty research and teaching interests in ecological and evolutionary problems. Postdoctoral experience is required. The successful applicant must: develop, or continue, an externally funded research program; develop and teach a course in comparative physiology; participate in the teaching of seminars or other established courses, depending on background; participate in the training of M.S. and Ph.D. students. Start-up funds competitive with other institutions. By 7 December 1989 send curriculum vitae, selected reprints, brief statement of professional goals and research interests, and names, addresses and telephone numbers of three references to: **Chair, Comparative Physiology Search Committee, Biology Department, SDSU, San Diego, CA 92182-0057.** *Applications from women, ethnic minorities, and disabled individuals are especially encouraged. SDSU is an Affirmative Action/Equal Opportunity Employer.*

DEVELOPMENTAL BIOLOGIST

St. Mary's College of Maryland is seeking a permanent, full-time developmental biologist to begin in the fall of 1990. Instructional responsibilities include courses in developmental biology, introductory biology, and specialty area. Strong commitment to undergraduate teaching and involving undergraduate students in research are both expected. Ph.D. required. Rank and salary based on level of experience. St. Mary's College of Maryland is a state-supported, liberal arts college with 1500 students. The college's waterfront campus is located in historic St. Mary's City, 70 miles southeast of Washington, D.C. Closing date for receipt of applications is 15 December 1989. Send curriculum vitae, three letters of reference, and statements of teaching/research interests to: **Dr. David Cribbs, Chairman, Biology 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.*



SENIOR RESEARCH TOXICOLOGIST
U.S. Air Force
Toxic Hazards Division

The U.S. Air Force is seeking a senior Research Toxicologist to serve as the Senior Scientist for the Toxic Hazards Division of the Armstrong Aerospace Medical Research Laboratory at Wright-Patterson Air Force Base near Dayton, Ohio. Qualifications include a degree in toxicology; or an appropriate discipline of the biological, medical, or veterinary sciences, which includes at least 30 semester hours in chemistry, biochemistry or physiology, and 12 semester hours in toxicology. A Ph.D. degree is desirable. Requirements include an extensive and authoritative background, experience and publication record in toxicology research. Experience in application of pharmacokinetic modeling of toxicological problems is highly desirable. Frequent travel may be required.

The Senior Scientist acts as the leader of the Air Force's scientific program in applied and basic toxicology research. He/She will act as the Air Force's focal point for extrapolation of animal studies for human hazard assessments as well as a key player in developing risk assessments for chemicals or exposure scenarios which are unique to the Air Force workplace. The incumbent will act as the technical advisor for all in-house and contracted research. He/She will act as mentor for junior scientists and post-doctoral fellows. The position requires acting as the Air Force's authority on toxicology in both the scientific and regulatory arenas.

The appointment will be at the GS-15 (\$57,158 per annum) level.

HOW TO APPLY: Applicants must submit an Application for Federal Employment, SF-171 to: ASD/DPCSB (ATTN: Victoria McKee), Wright-Patterson AFB, OH 45433-6503 with copies of transcripts, postmarked no later than 15 December 1989. If you are claiming 10-point veteran's preference, submit Claim Form SF-15 along with the required proof. The SF-171, Application for Federal Employment may be obtained through your local area Office of Personnel Management, your State Bureau of Employment Services or by writing to the above address.

APPLICATIONS WILL NOT BE RETURNED.

Qualified applicants will receive consideration for appointment without regard to age, race, religion, color, sex, handicap, national origin, or any other non-merit factor. For additional information you may call (513) 255-7345 or write to ASD/DPCSB, (ATTN: Victoria McKee), Wright-Patterson AFB, OH 45433-6503.

**TENURE TRACK FACULTY POSITION
IN PHYSICAL OCEANOGRAPHY**

The University of Alaska Fairbanks, Institute of Marine Science is seeking applicants for a tenure-track faculty position in the general area of coastal physical oceanography. The appointment will be with the Institute of Marine Science in the School of Fisheries and Ocean Sciences, and will involve research and graduate-level instruction and supervision. The Institute of Marine Science has a dynamic group of 22 faculty from various disciplines and about 35 graduate students. It is involved in a variety of research activities in northern high latitude, subarctic and arctic seas. Many of these activities are multi-disciplinary, and we wish to fill the position with a person committed to collaborative work with ongoing and future programs.

More than half of the coastline of the US is in Alaska including virtually all of the sea ice impacted coastline. Due to the presence of the Aleutian Low, there are interesting problems in wind and buoyancy driven circulation along the Alaska coasts especially in the Gulf of Alaska. There are good computing facilities available with convenient links to supercomputer facilities in the lower 48 states. The Institute maintains a marine station at Seward, Alaska with laboratories and sampling gear as well as support facilities for the UNOLS oceanographic ship assigned to the Institute, R/V Alpha Helix. The Alaska Synthetic Aperture Radar Facility located nearby on the Fairbanks campus allows access to the full spectrum of remote sensing capability for high latitude work.

Applicants should have interests in coastal ocean processes and be capable of carrying out field experiments. Modeling experience is desirable. They should also be interested in interdisciplinary studies of the effects of physical processes on biology, chemistry, geology and/or fisheries, and the relation of coastal studies to studies of regional and large-ocean circulation.

Candidates must possess a Ph.D. or equivalent experience in an appropriate discipline. We expect to fill this position at the Assistant Professor level, although, a more senior appointment may be possible, depending on the applicant's credentials. Closing Date 1 December 1989.

Applicants should send a statement of interest, a curriculum vitae and the names and addresses of three references to:

Chairman, Physical Oceanography Search Committee
c/o Director's Office
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1080
(Telemail: ALASKA, INST)

The University of Alaska is an Equal Opportunity/Affirmative Action Employer and Educational Institution.

Your application may be subject to public disclosure if you are a finalist. Person(s) hired for this position must comply with the new employment provisions of the Federal Immigration Reporting Act.



GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

The Geneva biotechnology research unit of the largest U.K. pharmaceutical group is recruiting

YEAST RESEARCHERS

**to investigate the molecular basis of signal transduction
via expression of heterologous genes in yeast**

Significant experience of the molecular and cell biology of yeast is required. Previous experience with signal transduction would be an advantage. The ideal candidate will have a PhD plus post-doctoral experience with a proven track record.

The Glaxo Institute for Molecular Biology carries out research to support the discovery of effective new medicines. The Institute has an international staff of over one hundred, grouped in teams of specialists from several domains of modern biology.

We offer an excellent salary and benefits package, with opportunities for career development in one of the most attractive parts of Europe.

If you are interested in this position, please send your Curriculum vitae with a list of publications and the names of three references to: Rita Gloor, Personnel Manager, GLAXO IMB S.A., 46, route des Acacias, 1211 Geneva 24, Switzerland.

POSITIONS OPEN

COMPARATIVE PHYSIOLOGIST, ASSISTANT PROFESSOR. Ph.D. required, postdoctoral experience preferred. The Biology Department, California State University, Los Angeles, will fill a tenure-track faculty position beginning fall 1990 for a person with research interests in comparative physiology of animals. The successful candidate is expected to teach undergraduate and graduate courses, and to develop a productive, independently funded research program. Specific duties include teaching an upper division comparative physiology course and teaching human anatomy and physiology for nursing students. Submit curriculum vitae, statement of research plans, and three letters of reference by 2 January 1990 to: **Dr. Betsy Peitz, Biology Search Committee, California State University, Los Angeles, CA 90032.**

*Equal Opportunity/Affirmative Action/
Handicapped Employer.*

DEAN COLLEGE OF BASIC SCIENCES LOUISIANA STATE UNIVERSITY AND A&M COLLEGE

Louisiana State University, a Doctoral I and Research I University, invites applications for the position of Dean of the College of Basic Sciences. The college includes approximately 190 faculty from the Departments of Biochemistry, Botany, Chemistry, Computer Science, Microbiology, Physics and Astronomy, Zoology and Physiology, and the Biodynamics Institute as well as the School of Geoscience with the Department of Geology and Geophysics, the Basin Research Institute, and the Coastal Studies Institute.

Responsibilities: The dean is expected to provide leadership and support for the faculty of the college; provide a positive environment for teaching, research, and service; manage budgets; and supervise faculty and staff recruitment, employment, evaluation, and promotion. The successful candidate should provide leadership in establishing effective working relationships with regional, professional, and industrial groups.

Qualifications: Candidates must provide evidence of a strong commitment to excellence in teaching, research, and service, have significant administrative experience, and possess academic qualifications to merit faculty rank of professor in one of the departments within the college.

Application and nomination procedures: Applications will be accepted until 15 January 1990 or until the position is filled. Candidates should submit a letter of application, a current résumé, and the names, addresses, and telephone numbers of five professional references. *Women and minorities are encouraged to apply.* Additional information may be obtained from the chairman of the Search Committee (504-388-6842). All correspondence should be addressed to:

**Dr. E. F. Zganjar, Chair
Dean of Basic Sciences Search Committee
Office of Academic Affairs
146 Thomas Boyd Hall
Louisiana State University
Baton Rouge, LA 70803-3103**

Louisiana State University is an Equal Opportunity Employer.

DIRECTOR OF RESEARCH, Reproductive Endocrinology. Direct activities of scientific research laboratory in the study of endocrine and immunologic factors of folliculogenesis and early pregnancy in the human and other mammals. Must have Ph.D. with specialization in cell culture and endocrine aspects of early mammalian pregnancy, and minimum of 6 years of experience in human fertility research. Must have supervisory clinical laboratory experience, and specific expertise in development and conduct of steroid radioimmunoassays, and of HPLC and bioassays for reproductive glycoproteins. Must have recent record of research on biochemical elements of embryo-maternal interactions in early pregnancy of the human and domestic mammals, immune modulation of early pregnancy, steroid dynamics during early and late pregnancy, application of human menopausal gonadotropins and GnRH analogs in programs of assisted conception, monitoring of early pregnancy loss, handling and use of domestic animals in mammalian reproductive research, and study of folliculogenesis in the human, as evidenced by principal authorship of directly related publications in peer-review journals. Salary: minimum \$75,000 per year. Résumé to: **Dr. Marrs, 1245 Wilshire Boulevard, Suite 905, Los Angeles, CA 90017.**

POSITIONS OPEN

DIRECTOR DIVISION OF PUBLIC AFFAIRS NATIONAL SCIENCE FOUNDATION WASHINGTON, D.C. 20550

NSF's Office of Legislative and Public Affairs seeks qualified applicants to manage division responsible for the Foundation's public affairs activities.

Appointment to this senior executive service position may be on a career or a 2- to 3-year limited term basis with a current salary range of \$68,700 to \$76,400. Alternatively, selectee may be assigned under Intergovernmental Personnel Act provisions, retaining current salary and benefits. Applicants must have an advanced degree or equivalent experience in field related to public affairs, public policy, or science/engineering; and demonstrated ability in communicating initiatives of a major organization to external audiences that include high-level officials of federal or state governments, representatives of research and academic institutions, scientific, educational, and professional organizations, and the general public. Knowledge of policy and budgetary issues affecting the scientific/engineering enterprise and funding of research also required.

Applicants should contact: **Barbara Coleman on 202-357-7601 (hearing impaired individuals may call TDD 202-357-7492)** to request Announcement EP 89-9 (career), EP 89-19 (limited term), or EP 89-26 (IPA) for complete qualification requirements and application procedures. Applications must be received by 29 December 1989.

An Equal Opportunity Employer.

EDITOR

Associate Book Review Editor for weekly, interdisciplinary scientific journal. Responsibilities include choosing books for review in consultation with outside advisers and other editors, choosing and negotiating with reviewers, and substantive editing of review manuscripts. Strong academic background and broad range of interests, including knowledge of or willingness to learn about natural sciences, essential. Knowledge of social sciences and public policy issues helpful. Reply in a letter long enough to demonstrate writing ability. Include résumé and state salary requirements. Submit to: **Gregory Stokes, AAAS, 1333 H Street, N.W., Suite #850, Washington, DC 20005.** *An Equal Opportunity Employer.*

DIRECTOR CENTER FOR RISK MANAGEMENT

Resources for the Future (RFF), an independent, nonprofit research and educational organization, invites applications and nominations for the position of director of its Center for Risk Management. The center conducts a variety of research and other activities related to the identification and assessment of risks to human health and natural ecosystems, the design of appropriate policies (public and private) to deal with these risks, and the effective communication between policymakers and the public about these risks and policies.

The director must be someone who: (i) has detailed knowledge of the strengths and weaknesses of the current U.S. approach to risk management; (ii) can lead and work with a talented, interdisciplinary staff in initiating research, policy-analytic, and educational activities to improve this approach; (iii) is experienced in working with the diverse participants in the policy process, in order to translate the center's work into action; and (iv) will be effective in broadening the center's funding from government, private foundation, and corporate sources. The director reports to the president and vice president of RFF.

Ph.D. or equivalent degree preferred. Consideration will be given to those with backgrounds in the social, natural, or life sciences; law; or engineering. Salary commensurate with experience; excellent benefits. Applicants should send cover letter, curriculum vitae, and the names, addresses, and phone numbers of three professional references to: **Dr. Paul R. Portney, Vice President, Resources for the Future, Box CRM, 1616 P Street, NW, Washington, DC 20036.** *RFF is an Equal Opportunity Employer. Women and minority candidates are encouraged to apply.*

POSITIONS OPEN

Salisbury State University invites nominations and applications for the position of **DEAN, Richard A. Henson School of Science and Technology.** The school was endowed by R. A. Henson, founder of Henson Aviation.

The position is available 1 July 1990. The deadline for applications is 15 December 1989. *Salisbury State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, and the disabled are encouraged to apply.*

For more information, write: **Dr. C. Richard McKenzie, Chair, Dean Search Committee, Department of Chemistry and Physics, Salisbury State University, Salisbury, MD 21801.**

EUKARYOTE MOLECULAR GENETICIST DEPARTMENT OF BIOLOGY (TENURE-TRACK POSITION)

Boise State University invites applications for a tenure-track **ASSISTANT PROFESSOR** position in the Department of Biology for fall 1990. Biologist with Ph.D. in eukaryote molecular genetics with a strong commitment to research and teaching excellence. Candidate will teach general genetics and introductory biology classes. Applicants conducting research in the areas of developmental genetics or the application of molecular genetics at the organismal level are encouraged to apply. Send letter of application, résumé, three letters of reference, reprints, and transcripts to: **Dr. Russell Centanni, Chair, Search Committee, Department of Biology, Boise State University, Boise, ID 83725,** by 15 January 1990. *Equal Opportunity Employer Institution.*

EXPERIMENTAL AVIAN BACTERIOLOGIST—PENN STATE. The Department of Veterinary Science in the College of Agriculture at The Pennsylvania State University, University Park Campus, is seeking an experimental avian bacteriologist to fill a tenure-track position (12 months) at the **ASSISTANT PROFESSOR** level. Applications are invited from interested individuals who possess the Ph.D. degree. A D.V.M. or equivalent degree and Board certification by the American College of Veterinary Microbiologists are desirable. Responsibilities include a major commitment to develop and conduct a significant independent and collaborative research program in avian bacteriology, to develop and teach an independent graduate or undergraduate course in pathogenic bacteriology or a related area, to assist with advice and counsel the avian microbiology service of the Animal Diagnostic Laboratory, to advise undergraduate students in the Animal Bioscience Program, and to instruct graduate students. Opportunities exist for cooperative research within the department, college, and university. The deadline for nominations and applications is 1 January 1990 or until the position is filled. The starting date is negotiable. Send current curriculum vitae, academic transcripts, and the names and addresses of three professional references to: **Dr. C. Channa Reddy, Chairman of the Search Committee, Department of Veterinary Science, W. L. Henning Building, Box 115A, University Park, PA 16802.** *An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

FACULTY POSITION IN BIOMECHANICS AT NORTHWESTERN UNIVERSITY

The Biomedical Engineering Department of Northwestern University and the Sensory Motor Performance Program of the Rehabilitation Institute of Chicago are seeking jointly to fill a tenure-track position in biomedical engineering at the **ASSISTANT PROFESSOR** level, for the 1990-91 academic year. Candidate should have earned a Ph.D. in engineering or in a related physical science; be knowledgeable in biomechanics, anatomy, and motor control physiology; and be prepared to teach and to conduct research in the field(s) of biomechanics and motor control. The candidate's research should complement present investigations on biomechanics of normal and pathological movement. Interested applicants should submit by 1 January 1990: curriculum vitae, outline of future research, teaching interests, and names and addresses of at least three references to: **Dr. Andrew E. Kertesz, Chairman, Biomedical Engineering Department, Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3107.** *Northwestern University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.*

RADIOCHEMIST/NUCLEAR CHEMIST
National Institutes of Health
Public Health Service

National Cancer Institute
Division of Cancer Treatment
Clinical Oncology Program
Radiation Oncology Branch

Qualifications: Position involves research in labelling monoclonal antibodies with metallic radionuclides for clinical use in tumor diagnosis and therapy. A qualified applicant should have:

- A Ph.D. in Nuclear Chemistry or Radiochemistry
- Experience in working with high levels of radioactivity
- Ability to do careful scientific measurements
- Knowledge of radiochemical separations and radionuclide purification

Biological or Radiopharmaceutical experience is desirable.

Salary: Dependent upon experience and qualifications.

Location of Position: Bldg. 10
National Institutes of Health, Bethesda, Maryland

For further information contact:

Dr. Otto A. Gansow
National Institutes of Health
Building 10, Room B3B69
9000 Rockville Pike
Bethesda, Maryland 20892
Telephone: (301) 496-5936



U.S. Citizenship Is Not Required

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

DIRECTOR OF DIAGNOSTIC
MOLECULAR BIOLOGY

The Department of Pathology of New York University Medical School is seeking an individual responsible for the direction of a Diagnostic Molecular Laboratory. This individual is expected to be well prepared in molecular biology approaches, to have his/her own research program, and be interested in the teaching and training of graduate students and residents. Training in Pathology is preferable. Salary and title are open, dependent upon experience and qualification. The Department of Pathology of New York University Medical School, in addition to providing a rich source of clinical and experimental material, has a strong research component presently covering areas such as molecular oncology, tumor viruses, growth factors, regulation of cell division and differentiation, cellular molecular immunology and DNA repair. Applicants which complement the present areas of strength are particularly desirable. Applications from minority groups are strongly encouraged. Interested individuals should send a curriculum vitae to: Vittorio Defendi, M.D., Department of Pathology, NYU School of Medicine, 550 First Avenue, Medical Science Building, Room 555, New York, New York 10016.

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Sr. Scientist-Physiology/Pharmacology

Will participate in a multidisciplinary research program focused on cardiovascular therapy. Requires a PhD in biological sciences with cardiovascular training and 1-3 years' relevant post-doctoral experience in vascular biology, receptor-ligand interactions.

Sr. Scientist-Molecular Biology

Will establish a research program to study the molecular aspects of vasoactive peptide processing and function. Requires PhD in Molecular Biology or related discipline and 1-3 years' post-doctoral experience in mammalian gene cloning and expression, preferably involving the molecules of importance in the cardiovascular system.

Viral Research:

Sr. Scientists

Will research new virus-combatting pharmaceutical drugs. Requires a PhD with 0-3 years' post-doctoral experience in Molecular Virology or Viral Pathophysiology. Demonstrated excellence in research and good communication skills essential.

We provide a highly competitive salary and generous benefits package. For immediate consideration, send your resume with salary history to: Mr. Louis DeMartino, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

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University of Pittsburgh

DEAN, GRADUATE SCHOOL OF PUBLIC HEALTH

The University of Pittsburgh seeks applications and nominations for the position of Dean, Graduate School of Public Health. The School is one of six schools of the health sciences on the campus of the University and its affiliated hospitals. The School enrolls 607 full- and part-time students (375 FTEs), studying for master's and doctoral degrees in the fields of biostatistics, human genetics, epidemiology, community health services, health administration, infectious diseases and microbiology, environmental health, occupational health, and radiation health. The Dean is responsible to the Senior Vice President for the Health Sciences. The annual expenditures of the School, including sponsored research, are in excess of \$22,000,000.

Candidates must have had substantial experience in the academic aspects of at least one of the fields of study at a level equivalent to a full professorship and preferably be engaged currently in research pertinent to that field.

Nominations or resumes should be sent before December 31, 1989, to:

George M. Bernier, Jr., MD
Chairman, Search Committee for
Dean, Graduate School of Public Health
M-246 Scaife Hall
University of Pittsburgh
Pittsburgh, PA 15261

An equal opportunity, affirmative action employer

Cardiovascular Pharmacology

Associate Senior Investigator/Senior Investigator

SmithKline Beecham Pharmaceuticals is ranked among the world's top Research and Development companies. Our U.S. Research and Development Division consists of over 1500 Scientists working in a state-of-the-art facility located in suburban Philadelphia, PA.

We have an opportunity for an Associate Senior Investigator/Senior Investigator to join our Cardiovascular Pharmacology team. This individual will have demonstrated expertise in studying coronary artery pharmacology/physiology and myocardial infarction. In addition, the candidate will be required to collaborate productively with scientists in other departments. Involvement in other projects within Cardiovascular Pharmacology will be encouraged.

The successful candidate will have a Ph.D. in Pharmacology/Physiology or a related discipline, together with experience with *in vivo* animal models. Three years of postdoctoral training and/or industrial experience is preferred.

We offer a very competitive compensation and benefits package, as well as opportunities for personal and professional growth. For confidential consideration, please submit your Curriculum Vitae and the names of three references, to: Nancy Hasson, Employment Administrator, #H0121, 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

Veterinary Pathologist

Syntex, an international leader in the pharmaceutical industry located in Palo Alto, CA, has an opening in the Institute of Toxicologic Sciences, for an experienced Veterinary Pathologist.

Working both independently and as a team member, you will provide support for the design, conduct, interpretation and reporting of studies to assess safety of pharmacological agents. This includes collaborating with research scientists on basic and developmental research projects and designing and conducting studies to investigate pathogenetic mechanisms of toxicologic lesions.

The qualified candidate will have a DVM and PhD in comparative or veterinary pathology, board certification by ACVP, with 3 or more years' experience in a research or industrial environment.

Located in the San Francisco Bay Area, Syntex offers a competitive salary, benefits and relocation package. For immediate consideration, please send your resume to: Syntex, Professional Professional Staffing, Dept. KH/VP, 3401 Hillview Avenue, Palo Alto, CA 94304. An equal opportunity employer.



DEPARTMENT CHAIR OF BIOLOGICAL SCIENCES

STATE UNIVERSITY OF NEW YORK AT BUFFALO

The Department of Biological Sciences at the State University of New York at Buffalo is searching for a Full Professor to build an outstanding research program and assume the position of Department Chair within one year of arrival. The starting date is negotiable and the successful candidate could begin as soon as September 1990. The Department presently consists of 27 full-time tenure-track faculty with research strengths in the areas of Cell and Molecular Biology, Genetics and Developmental Biology, Cellular Physiology and Ecology. We are committed to excellence in very active undergraduate and graduate programs. Our graduate program currently consists of approximately 50 full-time students. In addition to those who are supported by external grants, many of our graduate students are supported by state funds.

Superb core facilities are available to the Department for DNA and peptide synthesis and sequencing, computer structure modeling, monoclonal antibody production, animal facilities and state-of-the-art microscopy. In addition the Department has in place a well trained staff who operate and maintain the electron microscopy lab, greenhouse, electronics shop, machine shop and scientific illustration and photography lab.

We seek an outstanding scientist with demonstrated excellence in research and a genuine interest in quality graduate and undergraduate education. It is expected that the candidate will vigorously pursue an active research program, promote Departmental and interdepartmental interactions among the faculty, provide scientific, educational and administrative leadership and continue the development of the Department towards its goal of becoming one of the leading departments in the country. The University has committed considerable resources to this goal and will provide superb setup and operating funds. The opportunity to hire a considerable number of new tenure-track faculty will be available to the new chair.

Submit nominations and applications including curriculum vitae, summary of research interests and names, addresses and telephone numbers of four references to: **Dr. Ronald Berezney, Department Chair Search Committee, Department of Biological Sciences, State University of New York at Buffalo, Buffalo, New York 14260.** Deadline for receipt of completed applications is December 1, 1989, or until a suitable candidate is identified. *SUNYAB is an Affirmative Action/Equal Opportunity Employer.*

TOXICOLOGIST ENVIRONMENTAL/PRODUCT SAFETY

The Gillette Medical Evaluation Laboratories, a division of The Gillette Company, have an opening for a toxicologist in product safety and toxicology. Position responsibility includes involvement in environmental impact programs evaluating chemicals; the safety/risk assessment of ingredients/formulations; and the implementation of applicable government regulations in order to ensure the distribution of safe consumer products. Work includes cooperation in a team effort to assess air and water quality; initiation of clinical/toxicologic product safety studies and data analysis; and the review of drug claims and consumer medical comments.

Qualified candidates will possess a Ph.D. in Environmental Sciences, Toxicology, or Chemistry, as well as two to three years of experience in environmental impact assessments. Familiarity with aquatic toxicity testing and environmental fate of chemicals is also required. Experience in designing clinical/toxicologic tests for product safety evaluation and knowledge of industrial hygiene is desirable.

Gillette Medical Evaluation Laboratories are located in a new facility, outside of Washington, D.C., in an area rich in government, private, and academic scientific laboratories. We offer an excellent compensation, benefits, and relocation package. For consideration, please send a confidential resume to:



Gillette Medical Evaluation
Laboratories
Personnel Office
401 Professional Drive
Gaithersburg, MD 20879
Equal Opportunity Employer

DEPUTY HEAD, SCIENCE AND ENGINEERING SYSTEMS DIVISION

The Space Telescope Science Institute offers you the opportunity to contribute to one of the greatest scientific enterprises of the decades. An international center for research in Astronomy, we will be responsible for the scientific operation and systems support of the Hubble Space Telescope.

The Institute is looking for a Deputy Head of the Science and Engineering Systems Division. This Division of the ST Scl has the responsibility for the development and augmentation of science operations capabilities of the Hubble Space Telescope. Activities include developing in-depth understanding of the capabilities of the flight hardware and software, developing science operations concepts for use of these capabilities in support of the HST mission, carrying out system engineering studies and allocating requirements to ground system elements, and actual implementation of those ground system elements allocated to the ST Scl. During flight operations, the Division will also be responsible for engineering analyses and recommendations for improving overall observing efficiency. The ST Scl ground system elements which are the Division's direct responsibility include the proposal entry and processing system, long-range and short-range observation scheduling systems, and real-time and post facto data processing systems. Both traditional and state-of-the-art methodologies are used in these systems. The Division consists of six branches with a total staff of some 90 scientists, engineers, and software professionals.

This position requires a candidate with substantial direct experience in the development and operation of complex scientific hardware/software systems. A Ph.D. scientist with a strong physics or astronomy background, previous research record, and prior scientific/technical management experience is required. A background in space-based scientific operations is desirable.

Please submit resume, bibliography and the names of three persons who can be contacted for professional references to Mr. Robert Teleky, Personnel Officer, Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, Maryland 21218. ST Scl is an equal opportunity/affirmative action employer. Minorities and females are strongly urged to apply M/F/H/V.



Discover a bright future at Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc. As a subsidiary of Eastman Kodak, what makes Sterling outshine the rest is the unbeatable combination of a small, friendly company environment and the depth, resources, and growth potential of a large multinational corporation. So apply for one of the following openings and discover Sterling.

STERLING CAREERS.

Research Scientist/Sr. Research Scientist Protein/Peptide Physico-Chemical Characterization

The Department of Pharmaceutical Sciences is conducting research directed towards developing novel strategies for the stabilization of protein/peptide drug candidates in delivery systems. We are seeking scientists to conduct physico-chemical characterization work on novel protein/peptide drug candidates to support formulation development. Responsibilities include conducting studies to characterize properties including solubility, chemical stability, thermal behaviour, aggregation and adsorption; establishing analytical methods and conducting studies to elucidate degradative mechanism for drug substance.

RESEARCH SCIENTIST: Requires a B.S. or M.S. in Chemistry or Biochemistry with 2-5 years' experience in protein/peptide characterization. Experience with analytical techniques including chromatography and electrophoresis required. Knowledge of protein/peptide degradation pathways and techniques for isolation of degradation products is desirable. **Please respond to Position GV-212.**

SENIOR RESEARCH SCIENTIST: Requires a Ph.D. in Pharmaceutical Chemistry or Biochemistry or the equivalent with 1-5 years' experience in physico-chemical characterization of protein/peptides. Experience with analytical techniques including chromatography, electrophoresis, CD and microcalorimetry essential. Scientific publications demonstrating innovative research skills are essential. **Please respond to Position GV-114.**

Research Scientist Virology & Oncopharmacology

Successful candidate will be responsible for developing and running acellular and cellular molecular assays to study the effects of novel antisense oligonucleotides on gene expression at the level of transcription and/or translation. Candidates should have a B.S./M.S. in Molecular Biology or related areas in Biological Sciences with 3-5 years' relevant experience. Experience with enzyme assays, cell culture, electrophoretic techniques, autoradiography, DNA sequencing, southern, northern, western blotting, polymerase chain reaction and other general molecular biology techniques is desirable. **Please respond to Position GV-210.**

Research Scientists & Sr. Research Scientists Medicinal Chemistry

Sterling Drug also offers outstanding career opportunities for experienced medicinal chemists at the Ph.D. and B.S./M.S. levels. To support an expanding R&D facility we are recruiting creative thinking, highly motivated chemists to our Medicinal Chemistry groups in Rensselaer, NY, and Great Valley, PA. Candidates must have a degree in organic chemistry and a strong record of scientific accomplishments. Several years' relevant experience in the Pharmaceutical industry is strongly preferred. Familiarity with biochemistry and pharmacology, and molecular modeling experience are advantageous. **Please respond to Position GV-76.**

In exchange for your talents, we offer a competitive salary and benefit program that also shines. For confidential consideration, please send your resume, referencing position number above, with salary history/requirements and the names of three references to Employee Relations, Sterling Research Group, A Division of Sterling Drug Inc., 9 Great Valley Parkway, Malvern, PA 19355. An Equal Opportunity Employer.



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POSITIONS OPEN

MEMORIAL UNIVERSITY OF NEWFOUNDLAND ST. JOHN'S NEWFOUNDLAND, CANADA HEAD DEPARTMENT OF BIOLOGY

Applications are invited for the position of head, Department of Biology for September 1990. The department has 45 full-time faculty members and approximately 60 support staff and offers undergraduate and graduate programs to the Ph.D. level. Research and teaching are, at present, in four main focal areas: marine biology, evolution and ecology, parasitology/entomology, cell biology/microbiology. Some faculty hold cross-appointments to the Ocean Sciences Centre, the Department of Biochemistry, the Department of Psychology, and the Faculty of Medicine.

Applicants should have demonstrated ability in research and be able to show leadership and administrative ability appropriate to the post. The applicant should have a broad appreciation of the biological field and be responsible to the diverse requirements of this multidisciplinary department.

Address applications (including the names of at least three referees) or requests for further information to:

Dr. J. E. Strawbridge
Associate Dean of Science
(Chairman, Biology Headship Committee)
Memorial University of Newfoundland
St. John's, Newfoundland, Canada, A1B 3X7
Bitnet: JSTRAWBR@MUN.CA
Telephone: 709-737-8155
FAX: 709-737-4000

Applications should be received by 15 January 1990.

Memorial University encourages both men and women to apply for positions. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

FACULTY-LEVEL RESEARCH POSITION
available for studies on cell-matrix interactions involving extracellular matrix proteins and protein-based polymers (including elastomeric polypeptide matrices), chemotaxis and cell adhesion. Faculty level and salary commensurate with experience. Interested parties please contact: **Dr. Dan W. Urry, Director, Laboratory of Molecular Biophysics, School of Medicine, University of Alabama at Birmingham, P.O. Box 300, Birmingham, AL 35294. Telephone: 205-934-3543. An Equal Opportunity/Affirmative Action Employer.**

FACULTY RESEARCH ASSOCIATE. Research the behavior of surface atoms of structural ceramic materials (including silicon carbides) exposed to dopants, absorbates, tensile stress, and growth modes. Supervise graduate students using Ion Scattering Spectrometry (ISS) and Scanning Tunneling Microscopy (STM) techniques. Must develop silicon carbide films for research. Must have a Ph.D. in physics, 1 year of experience in university-level research and teaching, proven research ability, publication in peer-reviewed journals, and prior experience with ISS and STM techniques. Forty-hour week, 8:30 to 5:00, \$480 per week per calendar year. Qualified applicants send résumé or application letter with ad by 23 November 1989 to: **AZ DES Job Service, Attention: 732A Re: 0803188, P.O. Box 6123, Phoenix, AZ 85005. Job location: Tempe, Arizona. Employer-Paid advertisement. Proof of authorization to work in U.S. required if hired.**

FACULTY POSITION IN BIOMEDICAL ENGINEERING AT NORTHWESTERN UNIVERSITY

The Biomedical Engineering Department of Northwestern University has a tenure-track position in systems physiology or biomechanics at the **ASSISTANT PROFESSOR** level for the 1990-91 academic year. Candidates should have earned a Ph.D. in either engineering, or in a related physical science or quantitative physiology. Interested applicants should submit by 1 January 1990: curriculum vitae, outline of future research, teaching interests, and names and addresses of at least three references to: **Dr. Andrew E. Kertesz, Chairman, Biomedical Engineering Department, Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3107. Northwestern University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.**

POSITIONS OPEN

FACULTY POSITION—Department of Avian Medicine, The University of Georgia. Assistant or associate professor requiring the D.V.M., masters, and/or Ph.D. degrees. Responsibilities divided between clinical teaching in the MAM program, industry service, and research. Specific training and/or experience in clinical poultry health preferred. Deadline for receipt of applications with three references is 1 February 1990. Direct inquiries to: **Dr. S. H. Kleven, Avian Medicine Department, 953 College Station Road, Athens, GA 30605. An Equal Opportunity/Affirmative Action Institution.**

FACULTY POSITIONS ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE AT CHICAGO

Applications and nominations are invited for tenure-track faculty positions to be filled in the 1990 academic year. We are seeking candidates who are using modern molecular biological approaches to investigate problems in the general area of bioregulation including signal transduction/membrane interaction, growth control, and cell differentiation. Exceptional applicants in other areas will also be considered. Applicants should have a Ph.D., postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for the development of an independent research program. At the tenured level, applicants must have a strong record of research accomplishment. The Department of Biochemistry consists of 20 full-time faculty and has hired several new faculty in the areas of gene expression and membrane biology in recent years. The department and college have research support facilities that include nucleic acid and protein synthesis and sequencing. Applications should include curriculum vitae, a summary of current and future research plans, and the names of at least three individuals for references. Application deadline is 31 December 1989. Send applications or nominations to: **Robert V. Storti, Department of Biochemistry (M/C 536), University of Illinois College of Medicine at Chicago, 1853 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

FACULTY POSITION IN BIOCHEMISTRY DEPARTMENT OF BIOLOGY UNIVERSITY OF UTAH

As part of a campus-wide expansion in the area of biochemistry and molecular biology, the Department of Biology seeks applications for a tenure-track **ASSISTANT PROFESSOR** position in biochemistry, but will not exclude a higher rank if the right person is found. We hope to appoint an individual who has both basic training and current research interest in fundamental biochemistry and is able to teach biochemistry effectively. Research interest may include work on any biological process (in microorganisms, plants, or animals), but the approach should be biochemical. This individual should be able to interact productively with faculty and students having a wide range of research interests. In addition to biochemistry, the department includes molecular biology, cell biology, and genetics as well as organismal physiology, ecology, and evolution. Application review will start 1 January 1990 and continue until the position is filled. Applicants should submit curriculum vitae, description of research interests, and three letters of reference to: **Biochemistry Search Committee, Department of Biology, 201-S Biology, University of Utah, Salt Lake City, UT 84112.**

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

Applications for two positions in chemistry at Sarah Lawrence College are invited. One position is half-time **GUEST FACULTY** appointment for 1 year with possibility of renewal. The other is a full-time, tenure-track **FACULTY POSITION**. Strong commitment to teaching is essential and the candidate will be expected to contribute to curricular development. The college is located in Westchester County, New York, some 30 minutes from Manhattan.

Send résumé and two course descriptions (letters of recommendation will be required) by 31 January 1990 to: **Janet Held, Faculty Secretary, Sarah Lawrence College, Bronxville, NY 10708. Equal Opportunity Employer.**

POSITIONS OPEN

UNIVERSITY OF MIAMI FACULTY POSITION MUSCLE RESEARCH

Research assistant professor position available in a well-established and funded muscle research group. The laboratory is actively involved in studying the Ca^{2+} regulation of cardiac and skeletal muscle contraction by troponin using modern biochemical, biophysical, and molecular biological approaches. Applicants should have a Ph.D. or equivalent degree and experience in biochemistry, biophysics, or molecular biology.

Please send detailed curriculum vitae and names of three references to: **Dr. James D. Potter, Professor and Chairman, Department of Pharmacology, University of Miami, P.O. Box 016189, Miami, FL 33101. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION in visual system neurophysiology. The UCLA Psychology Department seeks a (tenure-track) faculty member engaged in research on central nervous system processing of visual information. Applicants must have a strong background in single unit electrophysiology and their research should be directed toward understanding the neural computations leading to perception and pattern recognition. Although we expect to hire a visual system physiologist, applicants working on other senses will be considered. Please send curriculum vitae and have three letters of reference sent to: **Physiological Search Committee (F. B. Krasne, Chair), Department of Psychology, UCLA, Los Angeles, CA 90024-1563. A typical reprint would also be welcome. Deadline for receipt of applications and letters of reference is 1 January 1990. The University of California is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION VECTOR TRANSMISSION DEPARTMENT OF PLANT PATHOLOGY UNIVERSITY OF CALIFORNIA, RIVERSIDE

Applications are invited for an 11-month tenure-track position at the assistant professor level. Appointee is to develop an independent program on vectored diseases and establish basic knowledge about pathogen-vector relationships. Opportunities exist for interaction with departmental programs on citrus, ornamental, field, and vegetable crops. Some of these programs include virology and virus diseases, molecular genetics of plant pathogens, and the physiology and pathogen host interactions. Teaching responsibilities include participation in team-taught plant pathology graduate courses, the opportunity to develop a graduate-level course on virus-vector relationship, and direction of graduate student research. Ph.D. required with experience in plant pathology and pathogen-vector relationships and an interest in working with viruses, fastidious prokaryotes, or other vectored plant pathogens. A curriculum vitae, complete transcripts, a statement of research interests, and three confidential letters of recommendation should be sent by 1 January 1990 to: **Dr. David J. Gumpf, Search Committee Chairman, Department of Plant Pathology, University of California, Riverside, CA 92521.**

*Women and minority candidates are encouraged to apply.
Equal Opportunity/Affirmative Action Employer*

FACULTY POSITION. The Marine Sciences Research Center (MSRC), SUNY Stony Brook, is accepting applications for an assistant professor position within the center's Living Marine Resources Institute (LMRI). Candidates are sought with a strong background in the population biology of commercially and/or recreationally exploited marine species. We are most interested in individuals with expertise in population dynamics and/or in shellfish biology. However, we encourage applicants from other specialized fields, such as genetics, behavioral biology, physiological ecology, etc. This is a tenure-track position, with an initial 3-year appointment. Starting salary is \$31,500 to \$33,500 for the academic year, which may be supplemented by up to 28% of the academic year salary for summer salary through grants and contracts. The MSRC is the center for research, graduate education, and public service in the marine sciences for the State University of New York system and is a comprehensive coastal oceanographic institution. Applicants should send a complete résumé, statement of research goals, and three letters of reference by 22 December 1989 to: **William M. Wise, Marine Sciences Research Center, SUNY Stony Brook, Stony Brook, NY 11794-5000. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.**

A major international pharmaceutical group, renowned for its consistent growth and product innovation attributable to one of the industry's highest ratios of investment in research and development, wishes to appoint a

HEAD OF RESEARCH

chemistry + pharmacology

Medically and/or scientifically qualified you must be able to demonstrate a clear and progressive record of achievement in the discovery of new drug entities. The group's continuing development programme includes an enhancement of its existing research facilities by the creation of a prestigious new research complex currently being constructed in the vicinity of Paris. Your appointment as Head of Research of this new facility will involve scientific, technological, financial and human resource management commencing with the recruitment of key personnel in all disciplines.

Please send a hand written letter and C.V. to PUBLIVAL/10002 - 27 Route des Gardes 92190 MEUDON (FRANCE) for onward transmission to the client company.

CHAIRPERSON DEPARTMENT OF CELL BIOLOGY UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE

The Department of Cell Biology of the University of Medicine and Dentistry of New Jersey, School of Osteopathic Medicine is seeking applications and nominations of distinguished academic scientists qualified to serve as the founding Departmental Chairperson. The new Department consists of six faculty and is expected to grow to twelve faculty under the leadership of its new Chairperson. The present faculty are young and vigorous and encompass research programs in signal transduction mechanisms, cell mobility and developmental neurobiology. The Department will have responsibility for the instruction of medical students in the disciplines of Physiology, Anatomy, Histology and Neuroscience.

We are seeking candidates who have an outstanding record of research achievements, who are dedicated to educational programs of high quality and who have administrative experience. Although we are seeking individuals with research interests in any area of modern cell biology, we are particularly emphasizing recruitment of individuals with research interests in cardiac physiology, cardiac or smooth muscle function or cellular neurobiology. The existing faculty in the school's clinical departments have a strong research focus centering around cardiopulmonary function and individuals seeking to engage in collaborative research programs in this general area are particularly encouraged to apply. Appointment will be made at the Professor level with a starting date as early as April 1, 1990 and no later than July 1, 1990.

Letters of application, curriculum vitae, and the names, addresses and telephone numbers of four references should be submitted to: **Dr. Richard Schimmel, Acting Assistant Dean for Basic Sciences, Department of Physiology, UMDNJ-SOM, (S), 675 Hoes Lane, Piscataway, NJ 08854-5635.**

The UMDNJ is an Affirmative Action/
Equal Employment Opportunity Employer M/F/H/V.



EXECUTIVE VICE PRESIDENT— RESEARCH AND PROGRAMS

Reporting to the President, the Executive Vice President will be responsible for the four operating divisions—Science/Engineering Education, Training and Management Systems, Medical Sciences, and Energy/Environment Systems. The Executive Vice President will be expected to provide broad scientific and managerial leadership, assist in the development of an innovative vision and a strategy to guide ORAU, and otherwise assure that ORAU identifies new challenges, is innovative and creative in its approach, and develops and operates programs of excellence. Additional responsibilities will include planning for growth and diversification through (a) division programs, (b) increased interdivisional programs, and (c) collaborative research opportunities with other national laboratories, universities, industry, and others; and performing liaison functions with DOE and federal laboratories to ensure ORAU contractual performance and programmatic excellence, identifying new opportunities, and assisting divisions with program development and implementation.

ORAU is a medium-sized multi-purpose national laboratory and a 49 member university consortium with a staff over 550 and an annual operating budget of over \$40 million. Since 1946 ORAU has conducted research and development, training and education, technical assistance, and technology transfer activities for the U.S. Department of Energy and other federal and private agencies. As a national laboratory, ORAU develops and manages programs to ensure that energy technologies are effectively utilized to meet national energy needs and to solve related scientific and human resource problems.

In addition to its national laboratory role, ORAU has begun to significantly strengthen its collaborations with and services to its member universities. ORAU is developing a separate not-for-profit contract research institute. ORAU also operates multi-university experimental research consortia in low-energy physics and primates.

Qualifications for the position include a Ph.D. or M.D. in science or engineering with demonstrated extensive line management experiences and abilities in planning, directing, and leading a diverse technical staff. Must be creative and have a successful track record at a research institute, university, government, or industrial research laboratory; understand the government research and development culture and university and industrial research; and be a team player who encourages initiative, participation, and sharing of ideas. Excellent oral and written communication and planning skills are required. Must be able to motivate others.

Applications should include a letter of application, a vita, list of publications, and the names and addresses of at least three references. Nominations including background information are welcome. Additional information about the position and ORAU will be provided on request. Recruitment will continue until the position is filled.

Address correspondence to:

**Jon M. Veigel, President
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117**

An EOE

POSITIONS OPEN

EXTENSION OF SEARCH NAMED PROFESSORSHIP IN BOTANY OR MICROBIOLOGY

The Department of Botany and Microbiology at the University of Oklahoma is seeking nominations and candidates for a named professorship in recognition of Dr. George Lynn Cross, former president of the university and chairman of the department. The Department of Botany and Microbiology has 20 faculty members, about 50 graduate students, well-equipped teaching and research facilities, and strong externally funded research programs. The candidate must be an established scholar with research interests in molecular aspects of physiology or a related area of modern biology to further advance the department's research and educational excellence and to help develop biotechnology in the state. Candidates must have a Ph.D. in a life science or related area and possess a distinguished, internationally recognized, and externally funded research program.

The candidate must submit curriculum vitae, description of current and future research goals, and the names of five references. Applications will be accepted until position is filled and reviewed at 2-month intervals starting on 1 January 1990. Application materials and nominations should be sent to: **Dr. Michael J. McInerney, Search Committee, Department of Botany and Microbiology, University of Oklahoma, Norman, OK 73019.**

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

FACULTY POSITION UNIVERSITY OF TEXAS MEDICAL SCHOOL AT HOUSTON, TEXAS

The University of Texas Medical School at Houston, Departments of Internal Medicine and Pathology, are seeking to fill a tenure-track **ASSISTANT PROFESSORSHIP** in their cardiovascular research group. Specifically, the candidate should possess a strong background in lipid biochemistry with expertise in the separation and quantitation of lipid mediators of inflammation, thrombosis, and hemostasis, including platelet activating factor and metabolites of arachidonic acid. Experience in the isolation of various blood cells, including platelets and neutrophils and in the culture of vascular endothelial cells is essential. Additional experience in phospholipase assays, protein purification, and various analytical techniques, including HPLC, gas chromatography, and GC/mass spectroscopy is also desirable. The successful candidate should possess a Ph.D. or equivalent degree with 5+ years of postdoctoral experience and is expected to develop an independent research program. Applications, including curriculum vitae, bibliography, research interests, and names of three references should be sent to:

James T. Willerson, M.D.
Professor and Chairman
Department of Internal Medicine
The University of Texas Health Science Center
at Houston
6431 Fannin Street
Houston, TX 77030

The University of Texas Health Science Center at Houston is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION ASSISTANT/ASSOCIATE PROFESSOR

The Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, seeks a Ph.D. or M.D., Ph.D. with specialization in reproductive sciences, physiology, or cellular/molecular biology for a tenure track position. One or more years of postdoctoral experience is essential. Experience leading a multiple disciplinary team is highly desirable.

Preference will be given to highly creative and exceptionally productive investigators with demonstrated independent research experience. Desire to work in a collaborative environment with funded clinician-scientists exploring the cellular aspects of male infertility, embryo-derived growth/angiogenic factors, or reproductive senescence/menopause is a high priority. The successful applicant is expected to establish an independently funded research program. A highly competitive salary, excellent benefits, and academic rank commensurate with experience are offered. Send application to: **James A. Simon, M.D., Chief, Division of Reproductive Endocrinology and Infertility, Georgetown University, 3800 Reservoir Road, NW, Washington, DC 20007.** Georgetown University is an Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology at the University of Texas Southwestern Medical Center at Dallas seeks applicants for tenure-track positions at the level of assistant or associate professor. Applicants must have a relevant Ph.D. or M.D. degree and postdoctoral training and must show evidence of a firm commitment to a career in independent research. We are particularly interested in applicants who plan to apply techniques of cellular or molecular biology or biochemistry to fundamental problems of pharmacological interest. Responsibilities include teaching graduate and/or medical students after the first year of employment. Send curriculum vitae, list of three referees, and a brief description of proposed research to: **Alfred G. Gilman, Chairman, Department of Pharmacology, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9041.** An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN PLANT BIOLOGY—TENURE TRACK

The Department of Biological Sciences at the University of Maryland Baltimore County (UMBC) has a tenure-track position for an outstanding **PLANT MOLECULAR BIOLOGIST/PLANT BIOLOGIST** at a rank commensurate with experience. The department has 25 faculty members and 80 graduate students whose research interests range from molecular to population biology with a strong emphasis in molecular and cell biology. The department occupies a modern, well-equipped building. Applicants should submit, by 15 January 1990, curriculum vitae, a statement of ongoing research, a brief description of future research plans, and the names and addresses of three references to: **Dr. Madeline Wu, Chair, Search Committee, Department of Biological Sciences, University of Maryland Baltimore County, Baltimore, MD 21228.** UMBC is an Equal Opportunity Employer.

FACULTY POSITIONS IN PHYSIOLOGY AT TULANE

Applications are invited for tenure-track appointments at all ranks. Candidates should hold the Ph.D. or M.D. degree, have a record of excellence in research, and be committed to teaching of medical and graduate students. Research areas marked for expansion include, but are not limited to, cardiovascular-renal, cellular/molecular, and membrane transport physiology. Previous applicants need only send updated material and a letter indicating continued interest. Send a résumé, description of research program, reprints, and four letters of recommendation to: **Dr. L. Gabriel Navar, Chairman, Department of Physiology, Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112.** Tulane University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN COGNITIVE/EXPERIMENTAL PSYCHOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

The Cognitive Sciences Department, University of California, Irvine (UCI), invites applications for five tenure-track positions, all with potential starting dates of 1 July 1990. One assistant professor position is in the area of **psycholinguistics**. Four positions are available at ranks ranging from assistant to full professor in the areas of **learning and memory, reasoning and decision-making, psychoacoustics, cognitive development, and cognitive neuropsychology**. Candidates should have a strong record of research accomplishment commensurate with their academic rank, and a serious commitment to graduate and undergraduate teaching in psychology. Applicants should submit curriculum vitae, three letters of recommendation, and a letter of interest indicating the area(s) in which they wish to be considered. (Several areas may be indicated, but for initial processing purposes, please designate one primary area from the six above.) Address materials to: **Recruitment Committee for [area], Cognitive Sciences Department, University of California, Irvine, CA 92717.** To ensure consideration for a 1 July 1990 starting date, applications must be received by 15 January 1990. UCI is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

RESEARCH FACULTY POSITION

The Public Health Research Institute (PHRI) invites applications for appointment as a member of its research faculty at either the junior or senior level. Candidates must have training and experience of the highest quality and an exciting research program addressing fundamental questions in eukaryotic or prokaryotic cell biology, virology, or molecular genetics. The research program must be funded or, in the case of a junior applicant, eminently fundable. The PHRI is an independent, not-for-profit research organization founded in 1942. Its current programs center on basic molecular biology and molecular genetics. The PHRI offers an excellent research environment and laboratory facilities, start-up funds, and a generous benefits package. Salary is negotiable. Candidates should submit curriculum vitae, a statement of research interests and accomplishments, and a list of at least three references. Review of applications will begin on 11 December 1989, but applications will be accepted until the position has been filled. Applications should be sent to: **Dr. Leonard Mindich, Chairman, Recruitment Committee, Public Health Research Institute, 455 First Avenue, New York, NY 10016.**

The PHRI is an Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITIONS. The Center for Neural Science of New York University invites applications for tenure-track faculty positions in the general area of systems and integrative and neuroscience. Candidates should be able to demonstrate excellence and originality in experimental and/or theoretical research. Appointments may be made at any level. The Center for Neural Science is an interdepartmental unit of the Faculty of Arts and Science, cooperating with the Departments of Biology, Chemistry, Computer Science, Mathematics, Physics, and Psychology. New members of the center hold appointments jointly in the center and one or more of these departments. Candidates should send curriculum vitae, a statement of current research interest, copies of relevant publications, and the names and addresses of three or more individuals willing to provide letters of reference, to: **New York University Center for Neural Science, Meyer Hall, New York, NY 10003.** Attention: Professor J. Anthony Movshon, Director. NYU encourages applications from women and members of minority groups.

FIELD STATION MANAGER/ RESEARCH ASSOCIATE CENTER FOR WATER AND THE ENVIRONMENT NATURAL RESOURCES RESEARCH INSTITUTE UNIVERSITY OF MINNESOTA, DULUTH

The University of Minnesota seeks a stream ecologist to manage and develop a research program at the Monticello Ecological Research Station. The facility consists of eight experimental streams adjacent to the Mississippi River, approximately 50 miles northwest of the Twin Cities metropolitan area. The position is a joint appointment in the Natural Resources Research Institute and the Department of Forest Resources of the University of Minnesota. Qualifications of the position include a Ph.D. in ecology or closely related field, postdoctoral experience desired, a demonstrated record of peer-reviewed publications and the ability to obtain extramural grant support. Special consideration will be given to individuals with experience in stream ecosystem modeling or experimental design and statistics. The duties of the position will include (i) management of the facility, (ii) coordination and promotion of research activity with scientists interested in using the facility, and (iii) development of a research program using the facility through externally funded grants. Interested individuals should call either **Dr. Gerald J. Niemi, Natural Resources Research Institute, 218-720-4279**, or **Dr. James A. Perry, 612-624-9796**, for more information. To apply, send a current résumé and names, addresses, and telephone numbers of three references. Applications must be postmarked by 31 December 1989. Send applications to: **Research Associate Search Committee, Natural Resources Research Institute, University of Minnesota, Duluth, 5013 Miller Trunk Highway, Duluth, MN 55811.** The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

Senior Scientist MOLECULAR GENETICS

The Department of Molecular Genetics in the Roche Research Center, seeks a Senior Scientist who will be responsible for an independent research program in Eukaryotic Molecular Biology and participate in research projects using recombinant DNA technology. The Department conducts basic and applied research on prokaryotic and eukaryotic gene expression, retroviruses, lymphokines, enzymes, oncogenes, growth factors, receptors, and other areas with relevance to human pharmaceuticals. Qualifications include a PhD in Molecular Biology, Biochemistry, Cell Biology or Virology and a minimum of two years' postdoctoral training. Individuals with experience in eukaryotic expression systems, including expression cloning, or in molecular biology as applied to cell biology are encouraged to apply.

The Roche Research Center is located in a suburban setting 10 miles from New York City. Roche offers a very competitive compensation package and a research environment that encourages scientific growth. Interested individuals should send curriculum vitae and a letter indicating future research interests, to: **Mrs. Eleanor M. Malone, Staffing and Employee Services, Department JK, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.



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S E A R C H F O R

DEAN OF GRADUATE SCIENCES

The Baylor College of Medicine, a private free-standing institution, invites applications and nominations for the position of **Dean of Graduate Sciences.**

The Dean of Graduate Sciences will be responsible for the quality and advancement of all aspects of Graduate Science Degree programs. The Dean for the Graduate Sciences will report directly to the President of the College. The Dean will work to:

- * Stimulate, support, develop, and coordinate Graduate Science programs;
- * Provide leadership to the Graduate faculty in developing educational and scholarly activity;
- * Participate in fundraising efforts in support of Graduate Science programs;
- * Develop and implement creative programs to recruit and retain Graduate students; and
- * Represent the Graduate School in national organizations and to oversee the general well-being of the Graduate programs.

Candidates for the position must have a Ph.D. or equivalent; have administrative experience with Graduate education; have a strong commitment to academic excellence, and possess effective oral and written communication skills.

Nominations and applications, including a current curriculum vitae, should be forwarded to:

Antonio M. Gotto, Jr., M.D., D.Phil., Chairman
Search Committee—Dean of Graduate Sciences
Baylor College of Medicine
6565 Fannin, M.S. A-601
Houston, Texas 77030

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RESEARCH & DEVELOPMENT

An Integrated Team at Baxter

Baxter Hyland Division's Research & Development group is located at a multi-million dollar facility equipped with state-of-the-art technologies. Here, professionals who bring expertise in biology, immunology, biochemistry, chemical engineering and other vital life science areas, are using applied and basic research techniques to develop biological products for the treatment of human disease.

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We currently have openings in Cell Culture, Process Analysis and Product Formulation. Two new start-up operations in Molecular Biology and Immunology have also created several openings for scientists and lead scientists to join our team of professionals. Positions range from entry-level to managerial.

Our compensation plan reflects the strength and size of the worldwide Baxter Healthcare Corporation organization. To find out more, send your resume with salary history to: **Baxter Hyland Division, Human Resources (CG), 4501 W. Colorado Blvd., Los Angeles, CA 90039.** An Equal Opportunity Employer.

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RESEARCH SCIENTIST TOXICOLOGY

Amgen has emerged as an innovative leader in the discovery and development of human therapeutics through applied biotechnology. As a result of our continued growth, we have an immediate opportunity for a Ph.D. level scientist in our Toxicology department.

Responsibilities will include the development of fully integrated programs for the *in vitro* and *in vivo* assessment of toxicological profiles of recombinant molecules pursuant to regulatory filings. The successful candidate will be in a unique position to evaluate systemic activities of recombinant molecules which relate to their potential clinical utility.

Qualified candidates for this position must have a Ph.D. in Toxicology, Pharmacology or a related discipline. A DVM degree may be of benefit. Essential requirements include a background in Toxicology and interest/experience in the areas of growth factors, hematopoietic factors and/or cytokines.

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EXECUTIVE DIRECTOR

SPOKANE INTERCOLLEGIATE RESEARCH & TECHNOLOGY INSTITUTE

Five Spokane, Washington colleges and universities are searching for an executive director of the research and technology institute recently authorized by the state legislature. The Institute is intended to stimulate economic and product development by fostering interactions between academic and private sector scientists in applied engineering and technology research. The Institute is organized programmatically around four elements: education and training, research and product development, business resource support, and information transfer. This is a senior level position requiring extensive experience in research, development, administration. Ph.D. in engineering or applied sciences preferred. Letter of application, three references, and curriculum vitae should be received by November 30, but no later than December 29. Application instructions and information available from: **Search Committee, Washington State University at Spokane, W. 601 First Avenue, Spokane, WA 99204-3099, (509) 456-3275.** WSU is an EO/AA educator and employer. Protected group members are encouraged to apply.

Research Assistant Professor Position

Clinical Mass Spectrometry Division, Department of Pediatrics

A Research Assistant Professor position is available in the Clinical Mass Spectrometry Division of the Department of Pediatrics, Children's Hospital Medical Center, University of Cincinnati, College of Medicine. The group is engaged in the application of the latest mass spectrometric techniques to clinically related projects, with a specific focus on steroid and bile acid metabolism. The candidate will participate in the teaching and training of research fellows and assistants in mass spectrometry, be expected to provide support to the group in running and monitoring instrumentation and be expected to independently develop further a program on vitamin D metabolism (in conjunction with the Division of Neonatology) by utilizing stable-isotopes of vitamin D to study the kinetics and disposition of vitamin D in the pre- and perinatal period in animal models and in man.

The Division is equipped with a Finnigan 4635 GC-MS-DS instrument with EI, CI and FAB ionization modes, a Vestec 201 thermospray LC-MS system and is soon to acquire a high resolution magnetic sector instrument. The candidate must have a PhD degree and at least 5 years' prior expertise in the operation and maintenance of mass spectrometry instrumentation and vacuum systems, and hands-on experience of the thermospray LC-MS technique which will be utilized extensively in these studies. Experience in the use of stable-isotopes for analytical and pharmacokinetic studies, and expertise in chromatographic procedures for the analysis of steroids and vitamin D and its metabolites in biological fluids is essential.



The position reports to Director, Clinical Mass Spectrometry. Resumes may be submitted to:

Children's Hospital Medical Center

Dr. Kenneth Setchell
Elland & Bethesda Avenues
Cincinnati, Ohio 45229
(513) 559-4753

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POSTDOCTORAL ASSOCIATES— M.I.T.

Applications are invited for post-doctoral associates with interests in mechanisms of chemical carcinogenesis. Educational background and/or experience in molecular biology/genetics of virology preferred for projects relating chemically-induced DNA damage to oncogene activation, mutagenesis, gene rearrangement, and expression. Related aspects include development of methodologies for detection of DNA damage in human tissues collected in epidemiological studies.

Please send curriculum vitae and the names of three references to Prof. G.N. Wogan, Division of Toxicology, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Room 16-333, Cambridge, MA 02139.

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International Research Fellowship Opportunities for U.S. and Foreign Postdoctoral Scientists

***Senior International Fellowships**

These fellowships offer opportunities to U.S. biomedical, behavioral, or health scientists to conduct research in a foreign institution. The program is for scientists who have established themselves in their chosen career in the United States and whose professional stature is well-recognized by their peers and institution officials.

The purpose of this program is to enhance the exchange of ideas and information about the latest advances in the health sciences, basic, clinical, and public health and to permit U.S. scientists to participate abroad in ongoing study or research in foreign institutions.

Fellowships are awarded for a period of 3 to 12 months and provide stipend, travel, and living allowance.

***International Research Fellowships**

These fellowships offer opportunities to foreign scientists in the formative stage of their career to extend their research experience in U.S. laboratories. Selections are first made by the Nominating Committee in participating countries, regions, or areas. Over 50 countries or regions in the Americas, Africa, Europe, Asia and the Far East, plus Australia, and New Zealand participate in the program.

The purpose of this program is to forge relationships between distinguished scientists in the United States and qualified scientists in other countries in order to study health-related problems of mutual interest.

Fellowships are awarded for a minimum of 12 months and provide stipend, travel, and institutional allowance.

***Foreign-Supported Fellowships**

These fellowships for U.S. scientists are supported by specific foreign countries and areas. They provide opportunities for scientists to conduct collaborative research in the country that provides funding.

The purpose of this program is to enhance the exchange of research experience and information in the biomedical, behavioral, and health sciences. The maximum period of support for all programs is 1 year, and the minimum period of support varies with each program.

Participating countries and areas are: FINLAND, FRANCE, FEDERAL REPUBLIC OF GERMANY, IRELAND, ISRAEL, JAPAN, NORWAY, SWEDEN, SWITZERLAND, and TAIWAN.

****Health Scientist Exchanges**

These programs for U.S. scientists support short- and long-term visits to AUSTRIA, BULGARIA, HUNGARY, POLAND, ROMANIA, the SOVIET UNION, and YUGOSLAVIA.

The purpose of these programs is to conduct collaborative activities in one of the health sciences or the health-related fields that are of mutual benefit to the United States and the participating country. Priority is given to visits designed to strengthen or expand ongoing collaborative relationships or to explore prospects for long-term cooperation.

The financial provisions include round-trip travel and in-country costs.

***AIDS Fellowships**

There are two programs to support scientists interested in AIDS research. The postdoctoral fellowship program supports U.S. and foreign scientists to conduct research abroad and in the United States, respectively. The minimum support is for 3 months, and the maximum support is for 24 months. Institutional awards have been made to four U.S. institutions for a 5-year period.

The epidemiology training grants provide long-term training which may lead to the M.S. or Ph.D. degree and short-term training in the United States or participating foreign countries. Only foreign scientists from developing countries may participate in this program. Institutional awards have been made to ten U.S. institutions.

The financial provisions of these programs include stipend, travel, and a host institutional allowance.

*Requests for additional information on Senior International, International Research, Foreign-Supported Fellowships, and AIDS Fellowships should be sent to: International Research and Awards Branch, John E. Fogarty International Center, National Institutes of Health, Bethesda, MD 20892.



**Requests for additional information on Health Scientist Exchanges should be sent to: International Coordination and Liaison Branch, John E. Fogarty International Center, National Institutes of Health, Bethesda, MD 20892.

POSITIONS OPEN

Stevens Institute of Technology invites applications for tenure-track **FACULTY** in immunology (microbiology background preferred) and microbiology to initiate strong research program and teach in graduate and undergraduate chemical biology program. Ph.D. and evidence of research required. Send curriculum vitae, three letters of recommendation, and research plans to: **Biology Search, Chemistry Department, Stevens Institute of Technology, Castle Point on the Hudson, Hoboken, NJ 07030.** Stevens is an Equal Opportunity/Affirmative Action Employer.

The Department of Psychology at the University of Colorado at Boulder invites applications for a **FACULTY POSITION IN BEHAVIORAL NEUROSCIENCE** starting September 1990. Outstanding applicants at any rank are encouraged to apply. This position carries with it attractive research space and significant start-up funds. *The University of Colorado has a strong commitment to the principle of diversity and is particularly interested in receiving applications from a broad spectrum of people including women, members of ethnic minorities, and disabled individuals.* Applicants should send curriculum vitae, three letters of recommendation, and a statement of teaching and research interest to: **Jerry W. Rudy, Chairperson, Behavioral Neuroscience Search Committee, Department of Psychology, Box 345, University of Colorado, Boulder, CO 80309.** Application deadline is 15 January 1990.

INSECT TOXICOLOGIST

ASSISTANT PROFESSOR, tenure track. The Department of Entomology, University of Wisconsin-Madison invites applicants who will pursue research on the physiology, genetics, or biochemistry of natural and/or synthetic toxicants affecting insects. An innovative, interdisciplinary research program that contributes to the basic understanding of mechanistic, evolutionary, or management aspects of resistance to such toxicants is expected. The incumbent will teach a contemporary course in insect toxicology. Submit a letter of application, curriculum vitae, transcripts, reprints, and three letters of reference by 15 January 1990 to: **Carol Scheehle, 237 Russell Laboratory, 1630 Linden Drive, Madison, WI 53706.** *The University of Wisconsin-Madison provides equal opportunities for admission and employment.*

THE CHINESE UNIVERSITY OF HONG KONG

Applications are invited for **LECTURES IN PHYSIOLOGY**. Applicants are expected to have a medical degree or a Ph.D. in physiology or a related field. The Department of Physiology teaches a 2-year physiology course as part of the preclinical medical course and participates in an intercalated degree course for medical students. Plans are currently under consideration to introduce a science course. The research field in which the department is currently engaged and for which it is equipped include: endocrine and reproductive physiology, gastrointestinal physiology and nutrition, muscle physiology, renal and acid-base physiology, as well as somatosensory physiology. The appointee is expected to participate in teaching physiology outside his or her research field. The successful applicants are expected to assume duty in May 1990 or as soon as possible thereafter.

Annual Salary and Fringe Benefits: Lecturer: HK \$233,700 to \$265,200 by two increments BAR or HK \$280,920 to \$390,600 by seven increments (approximate exchange rate: £1 = HK\$12.05; US\$1 = HK\$7.8). Starting salary will depend on qualifications and experience. Benefits include long leave, annual leave, sick leave, superannuation (university 15% of salary; appointee 5%), medical benefits, education allowance for children, and housing allowance for an appointee whose annual salary is HK\$249,480 or above. An appointee on overseas terms of service is entitled to have passage benefits for himself/herself and his/her dependents.

Application procedure: Applications should be made out in duplicate, giving full particulars and experience as well as the names and addresses of three referees, and sent together with copies of certificates/diplomas, testimonials, and recent publications to: **The Personnel Section, The Chinese University of Hong Kong, Shatin, Hong Kong**, before 30 November 1989. Please quote the reference number 87/509/2/89 and mark "Recruitment" on cover.

POSITIONS OPEN

INSECT BIOLOGIST

The Department of Entomology, University of Illinois at Urbana-Champaign, is seeking an assistant professor (tenure track), whose major interests are in insect biology and whose research program is concerned with molecular neurobiology, cell biology (structural or developmental), or genome analysis (including populations). Ph.D. required. Postdoctoral experience or other evidence of significant scientific accomplishment must be demonstrated. Teaching responsibilities will emphasize insect physiology. Salary range is competitive. Starting date is August 1990.

To receive full consideration, application must be received by 31 December 1989. Send curriculum vitae, statement of research plans, and names of three references to: **Dr. Stanley Friedman, Department of Entomology, University of Illinois, 320 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801.** Telephone: 217-333-8922. FAX: 217-244-1224. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

INVERTEBRATE AND VERTEBRATE ZOOLOGISTS

Applications are invited for two tenure-track positions at the **ASSISTANT PROFESSOR** level, effective 1 August 1990. Ph.D. required. Teaching responsibilities are two courses with laboratory per semester: Introductory Zoology and one advanced course (Comparative Anatomy, Invertebrate Zoology, Animal Ecology, or other in area of specialty). We are seeking individuals with a commitment to undergraduate science education and to active involvement of students in research. Research and teaching facilities include recently renovated laboratories, animal room, greenhouse, and SEM, all housed in the Life Science Building, and the adjacent 350-acre Biological Reserve. Send letters of application, three letters of recommendation, and transcripts to: **Dr. Philip Stukus, Chair, Department of Biology, Denison University, Granville, OH 43023.** Applications will be considered beginning 20 November 1989, and continue until the positions are filled. *Denison University is an Affirmative Action/Equal Employment Opportunity Employer.*

MANAGER OF MASS SPECTROMETRY in state-of-the-art research facility will be responsible for methods development and analysis of chemical and biological samples using mass spectrometry. Ph.D. in analytical chemistry or biochemistry, experience in GC spectrometry, and familiarity with stable isotope techniques. Please send résumé to: **Dr. Robert Russell, Chair, Mass Spectroscopy Search Committee, USDA Human Nutrition Research Center on Aging, Tufts University, 711 Washington Street, Boston, MA 02111.**

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MOLECULAR BIOLOGIST

The Department of Biology, The University of Alabama, is seeking applicants with research interests in the area of regulation of eukaryotic gene expression for a full-time, tenure-track position. The appointment can be made at any level, but special consideration will be given to full professor applicants with established publication and funding records. Generous start-up funds and space are available. Applicants should submit their curriculum vitae, a description of research plans, and the names of three references to: **Dr. John K. Hardman, Department of Biology, The University of Alabama, Box 870344, Tuscaloosa, AL 35487-0344.** Review of applications will begin 1 December 1989. *The University of Alabama is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR GENETICIST

Florida Atlantic University (FAU) invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level starting in August 1990. A microbial or cellular molecular geneticist is sought to establish a graduate research and teaching program in his or her subject area. Ph.D. required. Responsibilities also include undergraduate teaching. Forward curriculum vitae, reprints, transcripts, statement of research goals, and three letters of recommendation to: **Dr. Sheldon Dobkin, Chairman, Department of Biological Sciences, Florida Atlantic University, Boca Raton, FL 33431.** Applications should be received by 10 January 1990. *FAU is an Affirmative Action/Equal Opportunity Institution.*

POSITIONS OPEN

MALACOLOGIST

Field Museum of Natural History invites applications for a career-track position as **ASSISTANT CURATOR OF INVERTEBRATES** with specialization in Mollusca. We seek candidates who will develop an innovative program of research in systematic malacology in the broadest sense and contribute to care and growth of a large research collection. Scanning electron microscope, biochemical systematics laboratory, and computer center are available within the museum. Numerous opportunities exist for teaching and graduate student advising at several nearby universities. Applicants must have or be about to receive Ph.D. Application will be closed 10 January 1990. Applicants must submit curriculum vitae, statement of research interests and goals, and complete set of publications. They must also arrange to have three or more letters of recommendation sent to: **Dr. Lawrence R. Heaney, Chairman of Search Committee, Department of Zoology, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST/GENETICIST

Franklin and Marshall College invites applications for a tenure-track position as **ASSISTANT PROFESSOR**, to begin August 1990. Applicants should have a broad background in biology with extensive training in molecular biology and an active interest in both research and teaching. The successful applicant will teach an upper-level course in molecular biology and participate in teaching genetics and introductory biology. Start-up funds and a well-equipped molecular biology research laboratory are available. Curriculum development and research are also supported by a major grant from the Howard Hughes Medical Institute. Send curriculum vitae, graduate and undergraduate transcripts, and statements of research and teaching interests by 15 December 1989 and have letters of recommendation sent to: **Dr. David King, Department of Biology, Franklin and Marshall College, Lancaster, PA 17604-3003.** *The college is committed to cultural pluralism through the hiring of women and minorities. An Equal Opportunity Employer.*

MOLECULAR BIOLOGIST-MICROBIOLOGIST

Twelve-month tenure-track faculty position. Should be interested in studying bacterial disease pathogenesis, microbial virulence factors, or host defenses mechanisms. Seek scientist to apply modern molecular biology techniques to the study of bacterial diseases involving respiratory, enteric, or reproductive systems of food-producing animals. Will be expected to develop a competitive research program and participate in training graduate students. Start-up funds, technical support, and excellent laboratory and animal isolation facilities (BL2 and BL3) are available. Requires D.V.M. (or equivalent) and Ph.D. or Ph.D. in an appropriate discipline. Rank and salary will be commensurate with record of accomplishments. Send curriculum vitae and statement of research/career interests by 3 January 1990 to: **Dr. John A. Schmitz, Head, Department of Veterinary Science, University of Nebraska-Lincoln, Lincoln, NE 68583-0905.** Telephone: 402-472-2952. *Affirmative Action/Equal Opportunity Employer.*

NEUROSCIENCE FACULTY POSITIONS VANDERBILT UNIVERSITY MEDICAL CENTER

The Department of Molecular Physiology and Biophysics solicits applications for two tenure-track faculty positions in neuroscience, one as assistant and one as associate or full professor. Preference for one position will be given to an individual who uses electrophysiological techniques to study molecular properties and regulation of ion channels.

The research focus of the second position is open, but for both positions the ability to interface and interact with current departmental strengths in regulation of gene expression, intracellular signaling mechanisms, membrane biophysics, and metabolic regulation will be important.

Applications (curriculum vitae and three letters of recommendation) or requests for information should be directed to: **Neuroscience Search Committee, Department of Molecular Physiology and Biophysics, Vanderbilt University Medical Center, Nashville TN 37232-0615.** *Equal Opportunity/Affirmative Action Employer.*

Graduate Studies in Biochemistry

Why do students around the world choose the University of Alabama at Birmingham for graduate studies in biochemistry? Outstanding faculty. Exceptional funding. Multidisciplinary studies. The reasons are as varied as our research programs.

Whether your ultimate goal is academic or industrial research, you'll get the training you need at UAB.

Acceptance is competitive, but if you have a strong science background and are challenged by the environment of a thriving medical center, UAB offers you the opportunity to excel.

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For further information, contact:
Graduate Admissions Committee
Department of Biochemistry
The University of Alabama at Birmingham
Birmingham, AL 35294

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DIRECTOR OF CLINICAL PHARMACOLOGY

WALLACE LABORATORIES, the ethical pharmaceutical division of Carter Wallace, is seeking an individual with an MD and/or PhD in Biological Science to take a leadership role in our clinical research environment.

Overall position responsibilities will entail designing, conducting and interpreting results of human pharmacology studies. This may include studies of tolerability, evidence of therapeutic activity and the mechanisms of action.

The position requires a proven manager with a minimum of 5 years relevant experience with Phases I through III plus knowledge of Pharmacokinetics and Clinical Pathology. In addition, the successful candidate will be computer literate, and be able to interface with the FDA and clinical investigators.

Join a company with a tradition of developing top quality products. We offer a competitive starting salary and excellent benefits. For immediate consideration, send your resume with salary history to: **Keith I. Jones, Employment Manager, CARTER-WALLACE, INC., P.O. Box 1001 Half Acre Road, Cranbury, NJ 08512-0181.** An Equal Opportunity Employer M/F.

CARTER-WALLACE, INC.



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*

PROKARYOTIC GENETIC ENGINEERING Research Scientist and Postdoctoral Positions



CONNAUGHT
LABORATORIES LIMITED

Two positions are immediately available in a collaborative study between the Connaught Centre for Biotechnology Research in Toronto and the laboratory of

Dr. Robert Munson at the Washington University School of Medicine in St. Louis. The successful applicants will spend approximately two years in Dr. Munson's laboratory investigating bacterial vaccine development, employing state-of-the-art methodologies in prokaryotic genetic engineering.

The postdoctoral position is funded by the government of Canada and is limited to Canadian citizens and permanent residents. Following completion of the study the successful applicant will be eligible for transfer to the position of Associate Research Scientist in the Division of Molecular Genetics in the Connaught Centre for Biotechnology Research. Please send a **Curriculum vitae** and letters of recommendation to:

**Dr. Joel Haynes
Division of Molecular Genetics
Connaught Centre for Biotechnology Research
1755 Steeles Avenue West
Willowdale, Ontario M2R 3T4**

The research scientist position is not restricted to Canadian citizens. The successful applicant will have a Ph.D. in Microbiology or a related discipline and experience in prokaryotic genetics. Please send a **Curriculum vitae** and letters of recommendation to:

**Dr. Robert Munson
Department of Pediatrics
Washington University School of Medicine
400 So. Kingshighway Blvd.
St. Louis, MO 63110**

**CONNAUGHT LABORATORIES LIMITED IS
AN EQUAL OPPORTUNITY EMPLOYER**

POSITIONS OPEN

ORGANIC CHEMISTRY. The Chemistry Department of Williams College invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level for fall 1990. Candidates should have a Ph.D. (postdoctoral experience is preferred) and a strong commitment to teaching at the undergraduate level and developing a productive research program. The initial teaching assignments will largely be courses in organic chemistry, but additional assignments will be from other courses in the curriculum consistent with the individual's background and interests and the needs of the department. A semester teaching load normally includes complete responsibility for one course, including laboratory sections, and supervision of student research projects. Appointment at a senior level is possible under special circumstances. Williams College is a highly selective, coeducational liberal arts institution of approximately 236 faculty and 1950 undergraduates, located in northwestern Massachusetts. The Chemistry Department, with nine faculty members and 25 to 35 majors each year, is accredited by the ACS and has excellent facilities for teaching and research. Send résumé, undergraduate and graduate transcripts, description of research projects for undergraduates, and three letters of recommendation to: **Dr. Lawrence J. Kaplan, Chairman, Department of Chemistry, Williams College, Williamstown, MA 01267** by 1 December 1989. *Equal Opportunity/Affirmative Action Employer. We are especially interested in identifying minority and women candidates.*

FACULTY POSITION DEPARTMENT OF PHARMACOLOGY

The Department of Pharmacology at Wayne State University School of Medicine has experienced an exciting growth phase with the addition of five new faculty within the past 2 years. As a continuation of that process, the department invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Highly qualified applicants would also be considered at the **ASSOCIATE PROFESSOR** level. Applicants should have a Ph.D. or M.D., significant postdoctoral experience, and excellent research accomplishment. We are seeking outstanding individuals with research interests in any area of modern pharmacology including biochemical/molecular pharmacology, neuropharmacology, carcinogenesis, cancer biology, and toxicology. Individuals applying molecular biological approaches to the study of pharmacological problems are strongly encouraged to apply. Faculty members are expected to establish vigorous independent research programs and to participate in teaching medical, graduate, and postdoctoral students. An attractive start-up package will be available. Send curriculum vitae, summary of current research activities and future research plans, and names of three professional references to: **Professor Paul F. Hollenberg, Chairman, Department of Pharmacology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201.**

Wayne State University is an Equal Opportunity/Affirmative Action Employer.

PHARMACOLOGY FACULTY POSITION OHIO UNIVERSITY

Ohio University seeks to fill a tenure-track faculty position in pharmacology by 1 September 1990. A Ph.D. degree is required and postdoctoral experience is preferred. This position is a joint appointment in the College of Osteopathic Medicine and the Department of Zoological and Biomedical Sciences. The successful candidate is expected to develop an externally fundable research program. Collaborative opportunities exist in several areas, including: signal transduction and second messengers, cardiovascular and autonomic pharmacology, endocrinology, molecular and cellular biology, and neurobiology. The successful candidate is to teach neuropharmacology to osteopathic medical students, and to participate in training graduate (M.S./Ph.D.) students. Rank is open. Salary will be commensurate with rank and experience.

The letter of application, curriculum vitae, description of research plans, copies of most significant publications, and three letters of recommendation must be received by 2 January 1990. Address to: **Dr. Leon C. Wince, Pharmacology Search Committee, 228 Irvine Hall, Ohio University, Athens, OH 45701.**

Ohio University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

OCEANOGRAPHER. We intend to hire a tenure-track assistant professor to begin in fall 1990. We desire a candidate in the general area of biology or chemistry whose training and research will strengthen the links between the chemical and biological oceanographers on our faculty. Applicants should send a letter with their research interests, names and addresses of three referees, and a curriculum vitae by 31 December 1989 to: **Dr. William C. Burnett, Chairman of the Search Committee, Department of Oceanography, Florida State University, Tallahassee, FL 32306.** *FSU is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

PEDIATRIC HEMATOLOGIST ONCOLOGIST

Established university program seeking additional members for the **ASSISTANT PROFESSOR** level for busy Division of Pediatric Hematology Oncology. Strong research background required. Must be able to develop independent laboratory program. Will have direct patient care responsibility for children with entire range of malignancies and hematologic disorders. M.D., Ph.D., or enrollment in Ph.D. program required.

Interested candidates submit résumé and two letters of reference to:

**New York State Job Service
677 South Salina Street
Syracuse, NY 13202
Attention: Interviewer #51
Job Order NY0001926**

PHARMACOLOGISTS UNIVERSITY OF TORONTO

The Department of Pharmacology, Faculty of Medicine, University of Toronto, invites applications for three tenure-track Assistant Professorships from individuals well qualified to establish an independent first-class research program in one of the following areas:

1. molecular biology of receptors/signal transduction/second messengers
2. cellular/molecular toxicology
3. molecular biology/genetics of drug metabolism

Successful applicants will have promise in teaching as well as in research and will be expected to teach some portion of pharmacology to students in undergraduate, graduate, or professional (medical/dental) courses and to train graduate students. Qualifications should include a Ph.D. or M.D. degree with postdoctoral research experience. The starting date is July 1990 with some flexibility if necessary. Applications should include complete curriculum vitae, a letter stating current and intended research interests, and the names of at least three referees. Please indicate which of the three specific positions you are seeking. Apply before 15 January 1990 to: **Dr. Allan B. Okey, Professor and Chair, Department of Pharmacology, Medical Sciences Building, University of Toronto, Toronto, Ontario, Canada M5S 1A8.**

Both men and women are encouraged to apply. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

PHYSIOLOGY

The School of Biological Sciences, Georgia Institute of Technology, invites applications for a tenure-track position beginning September 1990. The appointment is expected to be at the **ASSISTANT PROFESSOR** level, although a higher rank will be considered if appropriate. The school has a broad program including plant and microbial physiology and seeks a physiologist who can complement the existing program. Applicants given preference will be those who can teach animal physiology as well as participate in general biology and have research interests related to toxicology or environmental issues.

Interested individuals should submit complete curriculum vitae, the names of three references, reprints of relevant publications, and a cover letter outlining their research interests and teaching experience to: **Dr. T. G. Tornabene, School of Biological Sciences, Georgia Tech, Atlanta, GA 30332.** The telephone number is 404-894-3747. Applications received before 1 February 1990 will be given fullest consideration. *The Georgia Institute of Technology is a unit of the University System of Georgia and is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PHARMACIST/PHARMACOLOGIST (GS-0660/0405-14). The National Cancer Institute, National Institutes of Health, Public Health Service, is seeking an experience drug development scientist to manage support service for development and supply of chemopreventive agents, dosage forms, packaging, and labeling. Studies to be supported include clinical trials and pre-clinical studies. Responsibilities include management of contract activities, interface with investigators and staff, and the provision of scientific input, overview, and direction of pharmaceutical/pharmacological aspects of a new and dynamic program. U.S. citizenship is required. Applicants should send their curriculum vitae and list of publications (or requests for further information) to: **Ms. Kathleen Signaigo, NCI Personnel, Executive Plaza South, Room T-43, 9000 Rockville Pike, Bethesda, MD 20892; telephone: 301-496-8657.** Deadline for application is 1 December 1989. *NIH is an Equal Opportunity Employer.*

PHYSICAL ANTHROPOLOGIST, Department of Anthropology, California State University, Sacramento. New tenure-track position beginning August 1990. Qualifications: Ph.D. in anthropology, primatology specialization preferred; college teaching experience; record of scholarly publications; primary commitment to teaching. Responsibilities: Teach introductory, upper-division and graduate courses in physical anthropology; supervise student research; advising, committees, course development. Salary range: \$31,668 to \$39,924. We are committed to improving faculty diversity. *Qualified women, underrepresented ethnic minorities, disabled individuals, and Vietnam-era veterans are encouraged to apply.* Deadline: 1 February 1990. Send letter, curriculum vitae, and two letters of recommendation to: **Anthropology Search Committee, California State University, Sacramento, CA 95819-2694.** *Affirmative Action/Equal Opportunity Employer.*

PHYSICIANS/SCIENTISTS


H. T. McCormick Inc., a nationally recognized executive search firm, has exclusive openings in leading pharmaceutical and biotechnology companies in the United States and Europe for: **Medical Directors/Clinical Research** in cardiology, nephrology, endocrine/metabolism, and infectious disease. Board-certified physicians with residency. Compensation to six-figure range. **Clinical Research** positions available for Pharm.D.'s and Ph.D.'s. **Clinical Research Associate** openings for experienced monitors. Salary considerations from mid-\$30,000 to mid-\$50,000; **Manager of Manufacturing Support** to lead group of 40 scientists involved in diagnostics products transfer. Extensive experience in diagnostics research, development, and production, M.S./Ph.D. biochemistry. Salary to \$90,000. **Assistant Director, Immunobiology**, to supervise production and development of new human monoclonal antibodies. Ph.D. in cellular immunology, 5 years of postdoctoral experience in hybridoma development. Salary to \$70,000. **Group Leader, Biochemistry**, to lead group of 12 protein chemists. Assay development, protein purification, and managerial experience. Ph.D. in biochemistry with 8 to 10 years in research. Salary to \$65,000. **Manager, Cancer Diagnostics**, to build group of six scientists. Ph.D. in biochemistry, microbiology, or immunology. Solid experience in development of cancer diagnostic products. Salary to \$65,000. **Manager, Infectious Disease Diagnostics:** Development of rapid diagnostic kits for the detection of sexually transmitted diseases. Ph.D. required. Salary to \$65,000. **Senior Research Scientists Opportunities:** Development of novel expression systems for the production of antibodies to be used for diagnostic imaging and therapy. Gene expression experience. Ph.D. in molecular biology; development of prototype essays to evaluate cancer markers. Experience with tumor-associated antigens. Ph.D. in biochemistry/immunology; development of innovative strategies for large-scale purification in the production of therapeutic monoclonal antibodies. Optimization, validation scale up. Ph.D. in biochemistry. Salary considerations to \$60,000. **Product Services Manager** to provide medical information to sales and marketing. Pharm.D. with drug information experience. Salary considerations commensurate with experience. Company-paid feces. Company-paid relocation if required. Submit curriculum vitae in confidence to: **Ann Lees, Vice President, Scientific Division, H. T. McCormick Associates, Inc., P.O. Box 1206, Princeton, NJ 08540.**



Ministerio de Educación y Ciencia.
Comisión Interministerial de Ciencia y Tecnología.

Research

The Spanish Ministry of Education
in and Science is encouraging foreign national researchers,
by means of grants/scholarships, to spend time in
Spain. Spain to pursue research projects
in universities and research centers.



Grant announcement for Ph.D's who have read their doctoral dissertation within the last seven years:

Application deadline date: May 31, 1990.

Beginning date: Last quarter of 1990;

Exceptionally, other dates may be considered.

Grant duration: Six months to two years.

Grant announcement for researchers on sabbatical leave:

Application deadline date: December 31, 1989.

Grant duration: Three to twelve months.

INFORMATION AND APPLICATION FORMS:

SECRETARIA DE ESTADO DE UNIVERSIDADES E INVESTIGACION.
Dirección General de Investigación Científica y Técnica.
C. Serrano 150, 4.^a planta, 28006 MADRID. SPAIN.
Telefax: (34/1) 262-5782

POSITIONS OPEN

PHARMACOLOGY/TOXICOLOGY SCHOOL OF PHARMACY AND ALLIED HEALTH SCIENCES UNIVERSITY OF MONTANA

Applicants should possess a Ph.D. in pharmacology or toxicology. Responsibilities will include undergraduate/graduate teaching, developing a research program, and participation in service activities. The position is an academic year tenure-track appointment. Salary is commensurate with qualifications and experience. Screening of applications will begin 1 February 1990. Applicants should send a letter of application, a résumé, transcripts, and three letters of recommendation to: **Dave Forbes, Dean, School of Pharmacy, University of Montana, Missoula, MT 59812. Telephone: 406-243-4621.** The University of Montana is an Affirmative Action/Equal Opportunity Employer.

PHYSIOLOGIST CITY UNIVERSITY OF NEW YORK MEDICAL SCHOOL

Applications are invited for a full-time tenure-track position in the Department of Physiology. The individual filling this position is expected to have an active fundable research program in cardiovascular, endocrine, neurotransmitter, or renal physiology. Other areas of specialization will be considered.

A priority of our program is on delivering a high quality of teaching to our medical students. The school has special commitments to increasing the number of physicians from presently underrepresented minority groups, to emphasizing the role of primary care, and to training for community-based primary care service to underserved urban areas of New York City. The salary range is from \$40,334 to \$78,891, commensurate with experience and qualifications. Send curriculum vitae by 4 December 1989 to: **Dr. Stanley Kalsner, Chairman, Department of Physiology, PP, CUNY Medical School:**

**City College of CUNY
138th Street and Convent Avenue
New York, NY 10031**

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

PLANT PHYSIOLOGIST

To investigate physiological process that relates to cotton productivity. Extensive training in field applications is essential, as is expertise in molecular approaches to plant physiology, water use efficiency, and pest tolerance. Successful candidate will be expected to develop a graduate-level course in modern research approaches to plant physiology and establish a productive research program. Department is developing strong interdepartmental program in plant physiology and plant molecular biology and excellent potential for extensive collaborative research.

PLANT GENETICIST

To establish a research program in plant genetics. Extensive training in conventional plant breeding is essential as is expertise in molecular approaches to plant improvement, e.g., RFLP and PCR technology. Successful candidate will be expected to develop a graduate-level course in molecular approaches to plant improvement and establish a productive research program. Department is developing strong interdepartmental program in plant molecular biology and excellent potential for extensive collaborative research.

Both positions are for tenure-track **ASSISTANT/ASSOCIATE/FULL PROFESSOR.** Applications consisting of a résumé, brief statement of research objectives, selected publications, and three letters of recommendation should be sent by 15 January 1990 to: **Dr. Brian Larkins, Head, Department of Plant Sciences, The University of Arizona, Tucson, AZ 85721.** *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION. Available to study control of calcium signals, protein kinases, and gene expression in T lymphocyte subsets from normal and aging mice. Some background in related areas (cell signaling, molecular immunology, and/or growth control) is required. Send curriculum vitae, with names and telephone numbers of three referees, to: **Dr. Richard Miller, Boston University, 80 East Concord Street, Boston, MA 02118.**

POSITIONS OPEN

PLANT CELL/ DEVELOPMENTAL BIOLOGIST

The Department of Botany at the University of Wisconsin-Madison invites applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR.** The department is seeking an individual employing contemporary techniques to study cellular or molecular aspects of differentiation and development. Applicants should have postdoctoral experience and a strong commitment to both research and teaching.

Submit curriculum vitae, three letters of reference, and statements of research goals and teaching interests by 1 December 1989 or until the position is filled to:

**Dr. Wayne Becker, Chair
Search Committee
Department of Botany
University of Wisconsin
Madison, WI 53706**

*Equal Opportunity/Affirmative Action Employer.
Women and minorities are encouraged to apply.*

POSTDOCTORAL ASSOCIATE

A position is available for structural studies of actin and tubulin and their associated proteins using electron microscopy and image analysis. The candidate for this position should have experience in protein purification and preparation and electron microscopy. A state-of-the-art facility for both electron microscopy and image analysis is available, and collaborations with other groups working on the cytoskeleton will be possible. The laboratory is part of a newly established Center for Structural Biology. Send curriculum vitae and references to: **Dr. Edward H. Egelman, Department of Cell Biology and Neuroanatomy, University of Minnesota Medical School, 321 Church Street, S.E., Minneapolis, MN 55455.**

The USDA-Agricultural Research Service is seeking two **POSTDOCTORAL RESEARCH ASSOCIATES:** (i) Research Geneticist (animal) to study the molecular basis for genetic variation in the bovine major histocompatibility complex; (ii) Research Physiologist/Immunologist or related field to study the effects of prolactin on immune system and adrenocortical development in neonatal pigs. Candidates must have completed Ph.D. Salary varies with experience (\$28,852 to \$34,580 per annum). Send résumés to: **Dr. N. Muggli-Cockett (position i) or Dr. H. Klemcke (position ii), Announcement no. OW001, USDA-ARS Meat Animal Research Center, P.O. Box 166, Clay Center, NE 68933.** Applications will be accepted until position(s) filled or 31 January 1990. *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION—MARINE INVERTEBRATE MOLECULAR EVOLUTION

The Smithsonian Tropical Research Institute in the Republic of Panama has a 2-year position available immediately for candidate with extensive experience in protein gel electrophoresis to carry out study of population genetics and systematics of bryozoans from the tropical Americas. Ph.D. in evolutionary biology, genetics, or systematics required. Experience with mtDNA analysis and SCUBA diving desirable. Salary \$23,000. Curriculum vitae and three confidential letters of recommendation should be received by 30 November 1989. Send to: **Dr. Jeremy B. C. Jackson, Smithsonian Tropical Research Institute, APO Miami, FL 34002-0011.** *Equal Opportunity Employer; employment not limited by nationality.*

POSTDOCTORAL POSITIONS RESERVOIR SCIENCE/AQUATIC ECOLOGY

The Center for Reservoir Research at Murray State University has several openings for 2-year appointments as research associates. The work is centered at the Hancock Biological Station and the Mid-American Remote Sensing Center and focused on long-term research on Kentucky Lake. Experienced associates in areas of physical modeling (lakes, reservoirs, estuaries), database management, and analysis, and algal physiology, algal systematics, or algal ecology are being sought. Inquire or apply (include résumé plus names, addresses and phone numbers of three references) to: **G. R. Marzolf, Hancock Biological Station, Murray State University, Murray, KY 42071.**

POSITIONS OPEN

POSTDOCTORAL POSITION—Pennsylvania State University, 1 January 1990. To study polyamine/ethylene regulation of ozone induced rubisco degradation. Research experience in plant biochemistry/molecular biology required. Send résumé and names of three references to: **Dr. E. J. Pell, 211 Buckhout Laboratory, University Park, PA 16802.** Closing date 15 November 1989. *An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

POSTDOCTORAL POSITION. Molecular Biology of Oncogenes. NIH/NRC position available for Ph.D. with training in molecular biology to study the structure/function characteristics of a nuclear oncogene [see *PNAS* 86, 1186 (1989)]. Position renewable for 1 year with starting salary of \$28,000. Must be U.S. citizen. Send curriculum vitae and names of three references to: **Dr. Herbert C. Morse III, Laboratory of Immunopathology, Building 7, Room 302, National Institutes of Health, Bethesda, MD 20892.** *The NIH is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION—EGF ACTION: to participate in studies aimed at elucidating the mechanism(s) of signaling between the EGF receptor and other proteins involved in cellular responses. A current emphasis is the reconstitution of EGF receptor into lipid bilayers and mechanism(s) of phosphorylation in signal transduction. Experience with protein purification and enzymology and some experience in recombinant DNA methodologies is desirable. Position available immediately or as late as 1 January 1990. Applicants with Ph.D. in biochemistry and molecular biology should send curriculum vitae and names of three references no later than 15 December 1989 to: **Dr. Tzipora Goldkorn, Co-Head, Receptor Biology, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021.**

POSTDOCTORAL—VISITING LECTURER to study the biochemistry and differentiation of the skeletal muscle outer membrane and myogenic lineage using monoclonal antibodies and recombinant DNA. Experience in cell biology, immunology, and molecular biology preferred. Opportunity to participate in teaching immunology to first-year medical students and to develop stable position with annual renewable appointments. Preferred starting date: 1 January 1990. Send curriculum vitae and names of three references to: **Dr. Stephen Kaufman, University of Illinois, Departments of Microbiology and Cell Biology, 131 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801. Telephone: 217-333-3521.**

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

POSTDOCTORAL RESEARCH ASSOCIATE. Position available 1 January 1990 to study colon carcinoma differentiation, focusing on changes in cell attachment molecules, starting at \$25,000 per year. Training in biochemistry/molecular biology required. Send curriculum vitae and names and telephone numbers of two references to: **Dr. Eileen Friedman, Memorial Sloan-Kettering Cancer Center, Box 244, 1275 York Avenue, New York, NY 10021.**

POSTDOCTORAL/RESEARCH ASSOCIATE. Positions are available working with a multidisciplinary research team on aspects of cartilage, bone and skin repair and regeneration. Research projects include the use of osteo-chondral progenitor cells isolated from adults, mitotic expansion of these cells in culture, and their re-introduction into orthotopic repair/regeneration sites in vivo. In addition, the role of the extracellular matrix in these events is also being experimentally explored. Experience with quantitative and qualitative morphometrics and histology, immunocytochemistry, cell and organ culture, monoclonal antibodies to cells or purified molecules, molecular biology probes and related assays, delivery vehicles for cells and molecules, or growth factor dynamics would be useful. In expressing interest in these positions, please include full curriculum vitae, request that three letters of reference be forwarded on your behalf, and include text on your previous experience and future goals. Submit information to: **Arnold I. Caplan, Ph.D., Director of the Skeletal Research Center, Department of Biology, Case Western Reserve University, 2080 Adelbert Road, Cleveland, OH 44106.** *We are an Equal Opportunity Employer and welcome all applications.*

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 in the following areas:

- Lymphopoiesis-including novel factors affecting lymphocyte growth and differentiation
- Hematopoietic stem cell biology
- Animal models of autoimmune diseases
- Studies on gamma/delta cells

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 C.S. Henney or S. Gillis at: **Immunex Corporation, 51 University Street, Seattle, WA 98101.** Equal Opportunity Employer.

IMMUNEX



TENURE EARNING FACULTY POSITIONS UNIVERSITY OF SOUTH FLORIDA, TAMPA DEPARTMENT OF BIOLOGY

The Department of Biology, University of South Florida, invites applications for three tenure-track positions at the assistant or associate professor level to begin September 1990. Each successful candidate will be expected to develop a vigorous externally funded research program, direct graduate (M.S. and Ph.D.) students, and typically teach one course per term as detailed below.

CELL BIOLOGIST: Applications are sought from individuals in all areas of Cell Biology. Candidates will be expected to teach an undergraduate cell biology course and to develop a graduate course in their area of expertise. Post-doctoral experience is required.

MICROBIOLOGIST: The specific area of research is not restrictive. The successful candidate will be expected to teach in the undergraduate (general microbiology and/or immunology) and graduate (area of specialty) microbiology programs. Post-doctoral experience is required.

COMMUNITY ECOLOGIST: The position is open to individuals working at the community level in any area of ecology. Teaching requirements include an undergraduate course in principles of ecology and a graduate course in community ecology. Post-doctoral experience is preferred.

Applicants should submit a curriculum vitae, a statement of research interests, and three letters of reference to the specific search committee: (Cell Biologist, Microbiologist, or Community Ecologist Search Committee), Department of Biology, University of South Florida, Tampa, Florida 33620-5150. Deadline for receipt of applications is January 2, 1990. USF is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

Applications are again invited for the **M.C. Chang** **Postdoctoral Fellowships** in **Male Fertility Research**

supported by the Andrew W. Mellon Foundation at
The Worcester Foundation for Experimental Biology

The Worcester Foundation's Male Fertility Program emphasizes multidisciplinary approaches to the study of male reproductive biology utilizing state-of-the-art techniques in biophysics, biochemistry, and cell and molecular biology. The faculty and their research interests are:

Lawrence J. Dangott: Receptors and mechanisms of chemical signaling in spermatozoa

Grant Fairbanks: Mechanism of sperm plasma membrane modification during epididymal maturation

Harvey M. Florman: Regulation of sperm signal transduction by the zona pellucida; regulation of sperm ion channels

Daniel L. Kilpatrick: Regulation of gene transcription during spermatogenesis; paracrine function of testicular peptides

John A. McCracken: Studies on sperm maturation, motility, and capacitation using surgical diversion of the male and female ducts

Clare M. O'Connor: Regulation of protein modification and turnover during gametogenesis

George B. Witman: Control of sperm motility during maturation and capacitation; phosphorylation of sperm flagellar proteins

David E. Wolf: Diffusion and control of membrane regionalization; sperm maturation, capacitation, and fertilization

Carol A. Ziomek: Membrane structure and cell polarity in early mouse development

The Worcester Foundation is a private, non-profit biomedical research institute offering excellent facilities and a stimulating research environment. Please send curriculum vitae and names of three references to the faculty member of interest, c/o **Male Fertility Program, Personnel Office, Worcester Foundation for Experimental Biology, Shrewsbury, MA 01545.**



**WORCESTER FOUNDATION
FOR EXPERIMENTAL BIOLOGY**

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER M/F/H



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Medicine

PhD and Combined MD/PhD Programs in Advanced Biochemistry & Molecular Biology

The graduate program in Biochemistry and Molecular Biology of The Jefferson Institute of Molecular Medicine and the College of Graduate Studies at Thomas Jefferson University, Philadelphia, invites applications from qualified students wishing to pursue a Ph.D. or combined M.D/Ph.D. degree. The Jefferson Institute of Molecular Medicine is a recently established, rapidly expanding state-of-the-art biomedical research group encompassing a broad and diverse range of scientific inquiry. The addition of 18 new faculty members has established a progressive molecular biology research base to complement the existing expertise of the biochemists previously recruited to The Department of Biochemistry. Research opportunities at The Jefferson Institute of Molecular Medicine are directed toward the investigation of the structure and function of macromolecules, DNA-protein interactions, the molecular genetics of development, tissue-specific gene expression, immunology and growth regulation, as well as human molecular genetics and the genetic and molecular basis of connective tissue and skin diseases.

Please contact; **The College of Graduate Studies, Thomas Jefferson University, M63 Jefferson Alumni Hall, 1020 Locust Street, Philadelphia, PA 19107 (215) 928-8982.**

THE SEVENTH CAROLINA CONFERENCE ON

Gene Transfer & Expression

March 17-20, 1990
Wrightsville Beach, NC

Stephen Hunt
Victoria Bautch
UNC-Chapel Hill
Conveners

SESSION CHAIRS AND TOPICS:

Control of Gene Expression; In Vitro Systems (Jenny Ting, University of North Carolina at Chapel Hill)

Negative Modulation of Gene Expression; In Vitro Systems (Matthew Hebdon, Glaxo, Inc.)

Modulation of Gene Expression in Plants (Ralph Quatrano, University of North Carolina at Chapel Hill)

In Vivo Modulation of Gene Expression; Transgenic Mice (Elizabeth Lacy, Memorial Sloan-Kettering Cancer Center)

In Vivo Modulation of Gene Expression in Mice; Embryonal Stem Cells (Elizabeth Robertson, Columbia University)

The total cost for room, board and registration is \$425. The number of participants is limited. Apply by **January 10, 1990** by writing a brief letter describing your research interests and their relevance to this meeting. For further information contact:

Jo Ann McPherson
The Program in Molecular Biology
& Biotechnology
CB# 7100, 130 MBBRL
UNC-Chapel Hill
Chapel Hill, NC 27599-7100



The
PROGRAM
IN
MOLECULAR
BIOLOGY &
BIOTECHNOLOGY

Co-sponsored by The North Carolina Biotechnology Center.

DIRECTOR PHARMACOLOGY/ TOXICOLOGY

LYPHOMED'S Ethical Pharmaceutical Research and Development division is expanding to ensure rapid and successful development of several new therapeutic drugs for prophylaxis and treatment of infectious diseases, cardiovascular diseases, metabolic bone diseases and cancer. Presently, we have a challenging opportunity available for Director of Pharmacology/Toxicology.

The selected candidate will possess a PhD in Pharmacology or Toxicology and at least 3-5 years experience with drug development in a pharmaceutical company.

Responsibilities include planning and conducting preclinical development of new drugs in conjunction with external laboratories and evaluating animal pharmacology and toxicology data for potential in licensing compounds.

Lymphomed is located in the western suburbs of Chicago, Illinois. The salary and benefits package is highly competitive and includes life, disability, health and dental insurance, a 401K plan and bonus/profit sharing. Please send your confidential resume and salary history to:

David Dvorak



Lymphomed

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equal opportunity employer m/f



POSTDOCTORAL FELLOWSHIPS WOODS HOLE OCEANOGRAPHIC INSTITUTION

Ocean Science and Engineering

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 oceanographic engineering. Recipients of awards are selected on a competitive basis, with primary emphasis placed on a research promise.

Marine Policy and Ocean Management

Research fellowships are offered to individuals in the social sciences, law, the humanities, or natural sciences to apply their training to problems or issues that involve the use of the oceans. Presently research follows thematic areas such as Marine Science and Public Policy; Ocean Jurisdictions, Law of the Sea, and International Relations; Development and Management of Ocean Resources; and Areawide Planning and Management. Emphasis is placed on the economics of ocean space and on the role of science in governmental and industrial decision making. Topics of special current interest include marine biological diversity, the quality of marine habitats and marine reserves, and the impacts of sea-level change. Other research interests are also appropriate.

Fellowships are rewarded for one year with a stipend of \$30,500 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, 1990** for 1990-91 awards. Awards will be announced in March. Write for application forms to: Dean of Graduate Studies, P.O. Box 5, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543

Equal Opportunity/Affirmative Action Institution

MARINE BIOLOGICAL LABORATORY



1990 Summer Courses

BIOLOGY OF PARASITISM (June 10-August 10) Daily lectures and laboratory for 16 advanced students on molecular parasitology covering the immunology, molecular biology and biochemistry of the interactions between parasites and their host. Co-Directors: John E. Donelson, University of Iowa School of Medicine and Carole Long, Hahnemann Medical College.

EMBRYOLOGY: CELL DIFFERENTIATION AND GENE EXPRESSION IN EARLY DEVELOPMENT (June 21-July 30) 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.

MOLECULAR PROBES IN MARINE ECOLOGY: CONCEPTS, TECHNIQUES AND APPLICATIONS (June 17-July 28) 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: J. Woodland Hastings, Harvard University.

MICROBIOLOGY: MOLECULAR ASPECTS OF CELLULAR DIVERSITY (June 10-July 26) 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 10-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 10-August 11) 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. Co-Directors: Leonard Kaczmarek, Yale University; Irwin Levitan, Brandeis University; Christopher Miller, Brandeis University.

PHYSIOLOGY: CELL AND MOLECULAR BIOLOGY (June 10-July 21) 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 23. Director: Thomas D. Pollard, Johns Hopkins University.

Application Deadline: March 1, 1990

Partial financial aid is available to qualified applicants.

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

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This position demands a creative approach
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Please write enclosing CV to *PUBLIVAL/9155*
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Graduate Study in Molecular and Cell Biology at Texas A&M University

**Cell Differentiation & Developmental
Biology
DNA-Protein Interactions
Endocrinology & Reproductive Biology
Gene Expression & Control
Immunology & Parasitology
Molecular Virology & Oncology
Plant & Animal Genetic Engineering
Signal Transduction**

Graduate research fellowships (\$12,000/year) are available
for an inter-disciplinary program. Ph.D. degrees are offered in
the Colleges of Agriculture & Life Sciences, Medicine,
Science and Veterinary Medicine.

For additional information:

**Dr. Terry L. Thomas
Molecular & Cell Biology Program
Department of Biology
Texas A&M University
College Station, TX 77843
(409) 845-0184**

POSITIONS OPEN

POSTDOCTORAL POSITION IN MICROBIOLOGY at Pittsburgh Energy Technology Center. Research position available immediately in Microbial Coal Cleaning Section of PETC. Project involves isolation of bacteria that remove sulfur from model compounds and coal. Graduate degree within past 3 years and U.S. citizenship or PRA status required. Contact: **Fossil Energy Postgraduate Program, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117, telephone: 615-576-3456 or 412-892-5884.**

POSTDOCTORAL ASSOCIATE IN PLANT MOLECULAR GENETICS. A position is available to study the mechanisms regulating the preferential expression of specific genes during anaerobic (flooding) stress in maize. A strong background in molecular biology is required. A solid understanding of genetics is desired. Applications including curriculum vitae, a summary of research interests and experience, and names of three references should be forwarded to: **Dr. Martin M. Sachs, Department of Biology, Washington University, St. Louis, MO 63130.**

POSTDOCTORAL POSITION available to study the role of protein kinase C isozymes in primary cultures of heart muscle. A strong background in biochemistry, cell biology, or molecular biology is required. Send curriculum vitae to: **Dr. Daria Mochly-Rosen, Department of Pharmacology, University of California, San Francisco, San Francisco General Hospital, Building 1, Room 101, San Francisco, CA 94110. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION is funded and available immediately to study the molecular and cellular biology of fibronectin gene expression during wound healing. Our research is focused on the mechanisms governing alternative splicing of fibronectin and the biological consequences of splicing during the process of tissue repair. Applicants should have a strong background in cell biology and have an interest in experimental pathology and molecular biology. Send curriculum vitae and the names of three references to: **Dr. Livingston Van De Water, Department of Pathology, Beth Israel Hospital, and Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215.**

POSTDOCTORAL POSITION in circadian neurobiology available January 1990 to study the functional organization of the hypothalamic suprachiasmatic nucleus using dissociated cell grafts and cultured cells. Excellent opportunity to gain experience in state-of-the-art neurotransplantation, neuroanatomical, and tissue culture techniques. Experience in monitoring behavior is preferred. A competitive stipend is available for at least 3 years. Send curriculum vitae and three letters of reference to: **Dr. Michael Lehman, Neurobiology Division, Department of Anatomy and Cell Biology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0521. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS IN CANCER RESEARCH are available immediately in interdisciplinary program located primarily in the Biology Division of Oak Ridge National Laboratory. Outstanding research facilities house programs in radiation and chemical carcinogenesis (R. J. M. Fry, M. Terzaghi-Howe, A. C. Marchok) and in several aspects of cancer biology and biochemistry, including: membrane biology (J. S. Cook), tumor immunology (S. J. Kennel), human DNA repair and mutagenesis (S. Mitra, J. D. Regan), growth factors (S. K. Niyogi), transcription and RNA processing (A. Stevens), regulation of gene expression (F. T. Kenney, K.-L. Lee), biologically active lipids (F. Snyder), chromosome structure and function (D. E. Olins), and molecular and cytogenetics (W. K. Yang, R. J. Preston, L. C. Waters). Salaries begin at \$22,000. Candidates must be U.S. citizens or permanent residents and recent (last 3 years) or prospective holders of a doctorate degree. Minority candidates are especially encouraged to apply. For information write to one of the scientists named or to: **Training Office, University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences, Biology Division, P.O. Box 2009, Oak Ridge National Laboratory, Oak Ridge, TN 37831-8077. UT is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study gene regulation during differentiation of the human malaria parasite *Plasmodium falciparum*. Research focuses on transcriptional control. The New York University Medical Center Department of Medical and Molecular Parasitology is committed to maintaining a culture facility for *Plasmodium falciparum*. Other faculty members are focused on the cell biology and immunology of the parasite providing a supportive research environment. U.S. citizenship or permanent resident status required. Send curriculum vitae and names and addresses of three references to:

**Dr. Laura Polog
Department of Medical and Molecular Parasitology
New York University Medical Center
341 East 25 Street
New York, NY 10010
Telephone: 212-340-6763**

POSTDOCTORAL POSITIONS. Available immediately to study the mechanisms of cell transformation on a molecular basis in fibroblast and epithelial cells. Experience in methods of gene activation, gene cloning, and other DNA technologies. Excellent salary and benefits. Send curriculum vitae with statement of experience in the above areas to: **Dr. Bruce C. Casto, Environmental Health Research and Testing, Inc., P.O. Box 12199, Research Triangle Park, NC 27709. EHRT is an Equal Opportunity/Affirmative Action Employer.**

TWO POSTDOCTORAL POSITIONS MOLECULAR BIOLOGY OF HUMAN HEMATOPOIETIC CELLS HARVARD MEDICAL SCHOOL

Available immediately for Ph.D.'s in molecular biology. One position to study the stem cell antigen CD34 and other human myeloid genes, defining cell type-specific promoters and using them in retroviral vectors and transgenic constructs (contact **Dr. Daniel G. Tenen**). The second position to study the regulation of expression, structure, and function of major proteins of human eosinophilic and basophilic leukocytes (contact **Dr. Steven J. Ackerman**). Send curriculum vitae and three letters of reference to above contacts at: **Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.**

POSTDOCTORAL POSITIONS IN PHYSIOLOGY OF EYE. Two positions available 1 January 1990 to study photoreceptor adaptation (*J. Physiol.* 416, 215-243), ganglion cell synaptic receptors (*J. Physiol.* 418, 53-82), or cell physiology of ciliary epithelium (*J. Physiol.* 418, 83-103); \$23,000 plus health. **Gordon L. Fain, Professor and Associate Director, Jules Stein Eye Institute, UCLA School of Medicine, Los Angeles, CA 90024-1771.**

PSYCHOPHARMACOLOGIST—The Department of Psychology of the University of Illinois Urbana-Champaign invites applications for a tenure-track faculty position beginning fall 1990. Candidates conducting research in any area of psychopharmacology/neuropharmacology will be considered. The search is for an assistant professor, but outstanding candidates at other levels are encouraged to apply. Salary negotiable. Send curriculum vitae, reprints, a statement of research interests, and three letters of recommendation by 15 January 1990 to: **Dr. Janice Juraska, Psychology Department, University of Illinois, 603 East Daniel, Champaign, IL 61820. Telephone: 217-333-8546. Affirmative Action/Equal Opportunity Employer.**

RADIATION BIOCHEMISTRY, HEALTH PHYSICS, RADIO CHEMISTRY, OR NUCLEAR MEDICINE. A tenure-track faculty position, rank open, is anticipated for fall of 1990. The position requires teaching in the undergraduate and graduate curricula (currently to the M.S. level), development of an active research program in a field that will complement existing faculty, and academic program development and management for the unique Nuclear Science Facility at San Jose State University. Deadline for receipt of all materials (application forms, transcripts, teaching interests, research interests, three letters of recommendation) is 22 December 1989. U.S. citizenship or permanent residence status is preferred. Send preliminary applications to: **Dean of Science, San Jose State University, San Jose, CA 95192-0099. SJSU is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE. Position available immediately for studies of blood coagulation activation in patients with thrombotic diseases. Experience in protein chemistry and immunoassay development is desirable. Competitive salary depending on experience and qualifications. To apply, please send curriculum vitae to: **Dr. John Owen, Hematology/Oncology, The Bowman Gray School of Medicine, 300 South Hawthorne Road, Winston-Salem, NC 27103. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for studies in vitro on DNA synthesis and recombination by HIV reverse transcriptase. We work with recombinant and not virion-derived enzyme. Prefer Ph.D. in biochemistry with experience in molecular biology and enzymology. Send curriculum vitae and three references to: **Dr. Philip J. Fay, Department of Medicine, P.O. Box 610, University of Rochester School of Medicine, 601 Elmwood Avenue, Rochester, NY 14642.**

RESEARCH DIRECTOR UTILIZATION CENTER FOR AGRICULTURAL PRODUCTS COLLEGE OF AGRICULTURE IOWA STATE UNIVERSITY

Applications are invited for research director of the Utilization Center for Agricultural Products. The director will provide leadership in developing innovative research projects in food technology and agricultural product development. Responsibilities: administration of a multidisciplinary research program, securing program support, and directing graduate research. Applicant should have administrative experience and demonstrated competence in working with industry on cooperative research and outreach projects. Ph.D. required in one of the areas of food science and technology, animal science, foods and nutrition, biochemistry, agricultural or chemical engineering, or related fields, with research and educational accomplishments sufficient for a tenured position in an appropriate department. Applications will be reviewed beginning 1 December 1989. Submit a current summary of education and research accomplishments and other professional activities, a list of publications, and three references to: **Thomas A. Fretz, Associate Dean, College of Agriculture, 104 Curtiss Hall, Iowa State University, Ames, IA 50011. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH INVESTIGATOR/NEUROCHEMISTRY. Responsible for establishing and maintaining the gas chromatography-mass spectrometry and the fast atom bombardment tandem mass spectrometry facilities required to support drug discovery projects in the area of stroke research; experimental design of animal experiments used in the testing of these drug candidates; providing analytical support of other project teams requiring the instrumentation established by the Research Investigator within his laboratory; directing and coordinating the activities of support personnel and one postdoctoral research fellow; interact with other neurochemistry and endocrine laboratories. Applicants must possess Ph.D. degree in pharmaceutical sciences coupled with 1 year of experience in the job offered or 1 year of experience as a postdoctoral scientist. Experience as a postdoctoral scientist must have involved research regarding the design of experimental procedures to evaluate the actions of drugs for the treatment of stroke utilizing gas chromatography-mass spectrometry and fast atom bombardment tandem mass spectrometry equipment. Forty hours, Monday to Friday, 8 a.m. to 4:30 p.m.; \$40,800 per year. Send résumés to: **Missouri Department of Labor and Industrial Relations, 505 Washington, St. Louis, MO 63101. Refer to Job Order No. 318775. An employer-paid ad.**

RESOURCE MANAGEMENT AND MARINE MAMMALOGY. Baja, Mexico, Field director and full-time resident faculty positions for undergraduate semester programs on marine mammal biology and conservation. Ph.D. and field experience in Mexico preferred. Spanish ability. Director candidates should have administrative and leadership potential in higher education, experiential, field setting. Salary \$23,000 to \$35,000. Apply to: **Baja Search, School for Field Studies, 16 Broadway, Beverly, MA 01915.**

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The wondrous bromeliad. In a rain forest, this elegant epiphyte provides food for insects and small animals nourished by micro-organisms collected in the plant's water-laden leaves—just one of the unique contributions that, together, maintain the overall strength and well-being of this ecosystem.

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The reason behind this initiative is simple. For Johnson & Johnson to continue as the world's health care products leader, we must make a firm and focused investment in the areas of drug discovery and development. And we're doing this by pooling the minds and resources of Ortho Pharmaceutical Corporation R&D, Cilag International Research Center, McNeil Pharmaceutical R&D, Ortho Biotech R&D and Johnson & Johnson Biotechnology Center.

Together, we have the resources and mass to meet the challenges of today's competitive research environment. And by meeting these formidable challenges, we will establish PRI as one of the world's leading pharmaceutical R&D companies. To do this, we're continually seeking entry through senior level candidates to join us at one of our several sites in the following positions: MDs, immunologists, chemists, biochemists, biochemical engineers, microbiologists, biologists and pharmacologists. Join an organization that realizes collective success begins with individual performance. Send your resume to: Selection Dept. SC-1103, R.W. Johnson Pharmaceutical Research Institute, PO Box 300, Raritan, NJ 08869-0602.

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POSTDOCTORAL RESEARCH POSITION available for Ph.D. synthetic inorganic or organic chemist to develop new Tc-99m and I-123 agents for diagnostic nuclear medicine applications. Experience in synthesis essential, familiarity with radioisotopes helpful but not necessary. Salary negotiable. Send résumé and references to: **Hank F. Kung, Ph.D., Department of Radiology, Donner Room 110, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104-4283.** *University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT/ASSOCIATE

Challenging and rewarding position available to develop novel immunodiagnostic assays. Applicants should possess a B.S. or M.S. in biochemistry or immunology and should have experience in immunochemistry, protein modification, and modern immunodiagnostic methods.

Epitope Inc. is an Oregon biotechnology company located outside of Portland, Oregon, that manufactures diagnostic kits and develops novel protective devices and therapeutic drugs for the health care field.

If you are interested, send résumé or curriculum vitae to: **Epitope Inc., 15425 S.W. Koll Parkway, Beaverton, OR 97006.**

RESEARCH ASSOCIATE

Positions are available immediately to study transcription, replication, and packaging signals of influenza virus RNAs and to develop new viral and bacterial vaccines using molecular biological technologies. Applicants with Ph.D. or M.D. degree should have experience in virological, molecular biological, and/or tissue culture techniques. Starting salary commensurate with experience. Please send curriculum vitae to: **Dr. Peter Palese, Department of Microbiology, Box 1124, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** *An Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE POSITION available immediately to study the lipid and polysaccharide components of the Lyme disease spirochete, *Borrelia burgdorferi*. [See *J. Infect. Dis.* **152**, 108 (1985)]. Send résumé, statement of research interests, and names of three references to: **Dr. Gail S. Habicht, Department of Pathology, SUNY at Stony Brook, Stony Brook, NY 11794-8691.** *SUNY at Stony Brook is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR. The Research Foundation of SUNY, Brooklyn, has a position to conduct research in radiobiology of mammalian cells, prepare microcell chromosome and DNA samples, and analyze DNA repair, size, and shape by viscoelasticity. Required Ph.D. in physics/biophysics/radiobiology and 5 years of experience in radiobiology with 3 years in tissue culture and viscoelasticity. Forty hours per week. Salary: \$29,106 per year. Send curriculum vitae and names and addresses of three references to: **Dr. C. S. Lange, Box 1212, SUNY Health Science Center, Brooklyn, NY 11203.**

RESEARCH ASSISTANT PROFESSOR. Research in the area of neuromotor control with emphasis on plasticity of the structure and function of the mammalian diaphragm muscle. Examine the developmental aspects of respiratory muscles and their neuromotor control. Background with small animal surgery, in vitro spinal cord-nerve-muscle preparations, motor unit physiology, histochemistry, and computerized imaging techniques. Working knowledge in neuromuscular development and plasticity is essential. Ph.D. in physiology, kinesiology, neurobiology, or other related discipline plus 1 year of experience as a research assistant professor or 1 year of postdoctoral research experience. Salary \$2500 per month. Place of employment and interviews: Los Angeles, CA. Send this ad and a résumé stating your qualifications to: **Job #CP 8844, P.O. Box 9560, Sacramento, CA 95823-0560**, no later than 18 November 1989.

POSITIONS OPEN

ASSISTANT RESEARCH BIOCHEMIST—Professional Research Series. Available to study tumor cell-extracellular matrix interactions which influence metastasis. Candidates must have a Ph.D. and a minimum of 3 years of postdoctoral experience in extracellular matrix protein chemistry and protein purification. Additional familiarity with molecular techniques an advantage. Please send curriculum vitae and names of three references to: **Sanford H. Barsky, M.D., Department of Pathology, UCLA School of Medicine, Los Angeles, CA 90024.** *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE CITY UNIVERSITY OF NEW YORK MEDICAL SCHOOL/ THE SOPHIE DAVIS SCHOOL OF BIOMEDICAL EDUCATION

The Department of Cell Biology and Anatomical Sciences has a research associate position available immediately to study the molecular biology of mammalian spermatogenesis. Individuals with demonstrated competence in protein purification, amino acid sequencing, and gene cloning are especially encouraged to apply. The department is building new research facilities for cell and molecular biology. Applicants must have a Ph.D. and/or M.D. degree with previous research experience in molecular cell biology and/or biochemistry.

Salary Range: \$24,140 to \$66,310 depending on experience. Send curriculum vitae, letter of application indicating research experience and interests, and also named and telephone numbers of three references by 15 December 1989 to: **Dr. A. L. Kierszenbaum, Chairman, Department of Cell Biology and Anatomical Sciences, The City University of New York Medical School, Room J 916:**

**CITY COLLEGE OF CUNY
138th Street and Convent Avenue
New York, NY 10031**

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Scientists in the CIBA-GEIGY Pharmaceuticals Division facilities located in Ardsley, NY are conducting studies leading to advanced drug delivery systems. The PhD level scientist we seek will establish buccal epithelial cells in culture, and investigate barrier properties using radio-labelled probes, model drugs, microscopy, electrophysiological techniques and other investigative methods.

Ideal candidate will have experience in maintaining epithelial cell cultures and will also possess excellent laboratory planning and organizing ability as well as good communication skills.

We offer competitive compensation, extensive benefits, as well as excellent career possibilities and location at CIBA-GEIGY Corporate Headquarters in suburban Westchester County. For consideration, please send **two** copies of your curriculum vitae with salary history and requirements to: **Patricia A. Garrett, CIBA-GEIGY Corporation, Dept. 2237, 444 Saw Mill River Road, Ardsley, New York 10502-2699.** We Are An Equal Opportunity Employer M/F/H/V.

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RESEARCH LABORATORY ASSOCIATE

St. Vincent's Hospital and Medical Center of New York, an 813-bed university hospital of New York Medical College is conveniently located in Greenwich Village. Our newly reorganized Department of Medicine, the hospital's largest clinical department, has a dynamic new chairman and features an accredited and expanding residency and fellowship program. As a result of this reorganization, a challenging new position is immediately available.

Our Research Laboratory Associate will be responsible for maintaining the research laboratory, conducting clinical and laboratory research, administering protocols, collecting and analyzing data and establishing plans and objectives for research. Requirements include BA degree or equivalent experience, plus animal research experience. Computer skills, including data entry and employment of statistical computer packages, are desirable. Good technical lab skills are essential.

We offer a competitive salary and benefits package and opportunities for professional/vocational growth. Send resume, and salary requirements or come in and fill out an application. Contact: **Nancy Goldstein, Interviewer, St. Vincent's Hospital and Medical Center of New York, 153 West 11th Street, New York, NY 10011.** An Equal Opportunity Employer.

SVH

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BIOTECHNOLOGY

CETUS

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Cetus Corporation is a leading biotechnology company engaged in the development, manufacturing and marketing of pharmaceutical products. We currently have exciting new biological agents and small molecular agents in clinical development and we seek Physicians with appropriate backgrounds to explore new applications against cancer and infectious diseases as well as additional indications for these agents.

The successful candidates will be responsible for clinical trials, providing medical input to preclinical and clinical projects, as well as supervising clinical monitoring staff.

Applicants should have some experience conducting clinical trials. Some bench research experience would also be desirable.

Cetus offers an outstanding benefits package along with the opportunity to participate in some of the most exciting scientific work in the Bay Area. Title and salary will be dependent upon prior experience. For consideration, please send your resume to Cetus Corporation, Box MD, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.



Research Assistant — Plant Biotechnology

Join American Cyanamid's Agricultural Research Division where you'll be part of a winning team committed to discovering ways to increase worldwide crop production through chemical, biochemical and biological research.

Permanent full time Research Assistant positions are available immediately in the Plant Biotechnology Group at our new facility in Princeton, New Jersey. Successful team candidates will be working with an exciting team of scientists in the areas of biochemistry, molecular biology, and plant cell culture to improve agronomically important traits of crop plants by genetic engineering.

Applicants should hold a Bachelor's or Master's degree and have at least a basic knowledge of molecular biology and/or biochemistry. Laboratory experience with molecular biological and biochemical techniques is preferred but not required.

Please forward your resume, with salary requirements, to the Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08540. An Equal Opportunity Employer M/F/H/V.



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RESEARCH ASSOCIATES PROTEIN BIOCHEMISTRY

Amgen is an innovator in the discovery, development and production of new protein therapeutics through recombinant DNA technology. As a result of our continued growth, we have an immediate need for Research Associates in our Protein Biochemistry group to contribute to on-going research programs in the purification and characterization of natural and recombinant proteins including various cellular growth factors and immunomodulators.

Candidates must have a BS or MS degree in Biochemistry or a related field with 2 years' research experience in Biochemistry. Experience with LC and HPLC/FPLC and a background in Analytical Biochemistry, Cell Biology or Molecular Biology are essential.

Amgen offers an excellent compensation and benefits package as well as the unique opportunity to contribute to the development of significant new human pharmaceuticals on the cutting edge of biotechnology. If you have the necessary qualifications and would like to be a part of a company that places a high priority on its human resources, please send a resume, in confidence, to:

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Cargill, a world leader in industry and agribusiness, is seeking two talented biochemists who have a demonstrated history of independent accomplishments. The successful candidates will be working to develop new products or new processes based on the separation, manipulation, or modification of agricultural materials. To qualify, a Ph.D. in biochemistry, bio-organic chemistry, or related area and 2-4 years post doctoral/industrial experience is necessary.

Senior Research Chemist Protein

This position focuses on proteins in agricultural material such as wheat, soy, and corn. The areas of research will include:

- Enzymatic modification of agriculture products;
- Chemical modification of proteins;
- Protein separation and analysis;
- Determining effect of processing conditions on protein functionality.

Senior Research Chemist Lipids

This position focuses on lipids in agricultural materials such as triglycerides in fats and oils, and phospholipids in vegetable oils. The areas of research will include:

- Enzymatic modifications of lipids;
- Determining the effect of processing conditions of fatty acid distribution;
- Chemical and physical characteristics of phospholipids in a non-aqueous environment.

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RESEARCH ASSOCIATE—CHEMISTRY. A postdoctoral research associate position is available to a qualified applicant for the synthesis of potentially useful therapeutic heterocycles. Applicants must have a Ph.D. in natural products chemistry with a minimum of 6 months of postdoctoral training. Must possess ability to carry out sophisticated state-of-the-art organic synthesis in the area of natural products and their synthetic analogs. Work will focus on the chemistry of cannabinoids and their derivatives. Skills essential: instrumental techniques (IR, MS, UV) and low and high field (1D and 2D) NMR spectral analyses and chromatographic separations (GC, HPLC). Forty hours per week, 9:00 a.m. to 5:30 p.m.; \$22,000 per year. Qualified applicants should send a résumé to: **Massachusetts Department of Employment and Training, Special Programs Department, 19 Staniford Street, Boston MA 02114, JO#91233.**

SCIENCE WRITER

Wanted to assist in the writing of scientific papers (immunology) in English by non-native-English speaking scientists. Please direct answers with telephone number as well as FAX/BITNET to:

J. Osbeck
Hindenburgerstrasse 4
5912 Hilchenbach
West Germany

Available position for **SENIOR RESEARCH TECHNICIAN** in biomedical research. Master of science in biochemistry, pharmacology, or entomology with at least 2 years of experience pre- or post-degree in protein purification, receptor assays, enzymology, tissue culture techniques, electrophoresis, phast system, FPLC, molecular biology, and computer data analysis. Salary: \$9.46 per hour, 40-hour week. Please respond to **Box 219, SCIENCE**. Refer to Job Order No. NC3090055, DOT code 090.227.010. If non-U.S. citizen, please indicate visa status. *Affirmative Action/Equal Opportunity Employer.*

STAFF SCIENTISTS PROTEIN DESIGN LABS

Protein Design Labs is a biotechnology company based on the concept of protein engineering. We are applying recent developments in molecular biology, immunology, protein chemistry, and computer modeling to create novel proteins for the treatment of human disease, especially autoimmune disease and cancer. Our first product, a humanized antibody for the prevention of organ transplant rejection, will enter clinical trials shortly. We have an outstanding group of scientists and scientific advisers, and an excellent location near Stanford University. Additional staff scientists and research assistants are needed in all areas. We can offer competitive compensation, stock in our growing company, and an opportunity to do exciting science. Send curriculum vitae to: **Dr. Cary Queen, Protein Design Labs, 3181 Porter Drive, Palo Alto, CA 94304.** *Equal Opportunity Employer.*

VETERINARY EPIDEMIOLOGIST—PENN STATE. The Department of Veterinary Science in the College of Agriculture at The Pennsylvania State University, University Park Campus, is seeking a veterinary epidemiologist to fill a tenure-track position (12 months) at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Applications are invited from interested individuals who possess the D.V.M. or equivalent degree and the Ph.D. degree in veterinary epidemiology. Board certification is desirable. Responsibilities include a major commitment to develop a significant independent and collaborative research program in veterinary epidemiology, direct the field investigation activities of the department, implement an extension education program in veterinary epidemiology, and advise and instruct graduate students. Opportunities exist for cooperative research within the department, college, and university. The deadline for nominations is 1 January 1990, or until the position is filled. The starting date is negotiable. Send current curriculum vitae, academic transcripts, and the names and addresses of three professional references to: **Dr. R. J. Eberhart, Chairman of the Search Committee, Department of Veterinary Science, W. L. Henning Building, Box 115A, University Park, PA 16802.** *An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.*

POSITIONS OPEN

University of California, Irvine, Student Recommended Faculty Program seeks a **VISITING LECTURER** for a 1-year appointment for the academic year 1990–91 to teach courses in marine biology. This topic area would encompass the productivity and life chain of the ocean. The courses would also include the ecology of the ocean and the balance of its organisms within. A possible subtopic might be the farming of the ocean while avoiding its decimation. Send curriculum vitae, three reference letters, teacher evaluations (if available), and course syllabi to: **Robert Mai, ASUCI-SRFP, University of California, Irvine, CA 92717.** Deadline to ensure consideration: 8 December 1989.

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FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP position open immediately, in the Division of Oral Biology, University of California, San Francisco, School of Dentistry, to study Epstein-Barr virus gene expression in epithelial tissues. Experience in molecular biology, cell culture, and transformation desirable. Stipend commensurate with experience. Please send inquiries, curriculum vitae, and three letters of recommendation to: **Dr. John S. Greenspan, Chairman of Stomatology, Box 0512, University of California, San Francisco, CA 94143–0512.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS AT THE SCRIPPS INSTITUTION OF OCEANOGRAPHY

Applications are invited for postdoctoral awards from new or recent Ph.D. students in all major areas of research conducted at the Scripps Institution of Oceanography (SIO). Interest areas include physical, chemical, and biological oceanography; marine geology, geochemistry, and geophysics; marine chemistry; marine biology; and ocean engineering. Specific areas of interest might include continental margins and coastal sciences; marine meteorology and air/sea interaction; global climate change; atmospheric chemistry; large-scale ocean circulation; marine microbiology; isotope geochemistry; and satellite oceanography. Awards will be made on a competitive basis with major emphasis on the recipient's potential for independent and creative research. Fellowships will be awarded for 1 year with stipends commensurate with experience, plus benefits and a small budget for publications, travel, etc. Renewals for a second year, depending upon performance, are possible.

Applications should include complete transcripts of graduate records, curriculum vitae, addresses and telephone numbers of at least three references, and a concise synopsis of the applicant's doctoral research and research interests to be pursued at SIO. All application materials must be received by 15 January 1990. Awards will be announced by early April 1990. Application and questions should be addressed to: **Chairman, Graduate Department, Scripps Institution of Oceanography, University of California, San Diego, A-008, La Jolla, CA 92093.**

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

PROGRAM

DOCTORAL PROGRAM IN MICROBIOLOGY seeks quality candidates to study molecular genetics, cell biology, virology, immunology, pathogenic microbiology, microbial biochemistry, biotechnology, and applied and environmental biology in a cooperative program between Rutgers, The State University of New Jersey, and the University of Medicine and Dentistry of New Jersey. Eighty-one faculty from various university departments, research centers, and institutes participate in the program to provide excellent research training and employment opportunities. Fellowships, assistantships, and scholarships provide up to \$12,000 stipend plus tuition to qualified applicants on a competitive basis. Contact: **Dr. Alan D. Antoine, Graduate Program in Microbiology, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903.** Telephone: 201-932-9881, Fax: 201-932-6769. *An Affirmative Action/Equal Opportunity Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP YALE UNIVERSITY SCHOOL OF MEDICINE

A research position is available to study the molecular basis of phototransduction by human skin pigment cells. Send curriculum vitae and the names of at least two references to: **Dr. Aaron B. Lerner, Department of Dermatology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.** *Yale University is an Equal Opportunity Employer.*

PROGRAMS

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Graduate Study in Engineering and Public Policy (EPP). The EPP Graduate Program leads to a research-based Ph.D. specializing in policy issues in areas such as: telecommunication, computer and other information technologies; design and application of conventional and AI-based computer systems for policy analysis and decision support; mathematical modeling of energy and environmental systems; technical and economic issues of peace and international security; manufacturing and industrial policy; and risk analysis. Applicants must hold a bachelor's degree in engineering, physical sciences, or mathematics. Education or experience beyond the bachelor's degree is very desirable. Contact: **Dr. Indira Nair, Engineering and Public Policy (07), Carnegie Mellon University, Pittsburgh, PA 15213.**

THE EXPOSITORY WRITING PROGRAM at Harvard University hires part-time preceptors each year. A special area of need this year is in the field of writing about science. Two sections a term, 15 students a section, salary for 1990–91 approximately \$22,500. One-year contracts renewable for 4 to 5 years. We prefer people who have successfully taught and published. Please send résumé (including names and telephone numbers of recommenders), a list of publications, and a non-fiction prose writing sample to: **Ms. Julia Hendrix, Administrative Assistant, Expository Writing Program, 305 Harvard Union, Harvard University, Cambridge, MA 02138.** Applications due by 1 March 1990.

PREDOCTORAL INTERDISCIPLINARY PROGRAM CELL STRUCTURE AND FUNCTION IN HEALTH AND DISEASE

The University of Florida is initiating a new program providing well-qualified graduate students with a broad spectrum of research opportunities in cell structure and function tailored to the specific needs of each student. Faculty interests are diverse and include developmental and regulatory biology, intracellular targeting, cytoskeleton, signal transduction, immunobiology, cancer biology, and the mechanism of viral infection. The student will receive a Ph.D. degree jointly through a basic sciences department and the Interdisciplinary Program. Competitive stipends are offered by the program. For further information contact: **Dr. Carl Feldherr, Department of Anatomy and Cell Biology, College of Medicine, University of Florida, Gainesville, FL 32610–0235.**

MARINE BIOLOGICAL LABORATORY (MBL)

Opportunities for underrepresented minorities (Black, Hispanic, Native Americans) for participation in programs at the MBL.

- Scholarships for students accepted into any MBL course (summer course application deadline is 1 March 1990).

- Summer research opportunities for graduate students (sponsored by the American Society of Cell Biology Minority Affairs Committee).

- The Porter Fellowships for undergraduates, graduate students, and postdocs to do summer research in the field of physiology with senior investigators at the MBL.

Please make inquiries about research opportunities by 15 February 1990. For application forms and additional information, contact: **Fellowship Coordinator, Office of Sponsored Programs, Marine Biological Laboratory, Woods Hole, MA 02543.** Telephone: 508-548-3705, ext. 441.

MBL is an Equal Opportunity/Affirmative Action Institution.

FELLOWSHIPS

POSTDOCTORAL FELLOW (2 years) and RESEARCH TECHNICIAN (permanent). Positions available in a laboratory that is developing methods for physical mapping of bacterial and human genomes. Funding from the DOE and NIH human genome projects. Prefer experience in tissue culture, retrotransposons, transposons, or enzyme purification. Independence and creativity encouraged. Send curriculum vitae to: **Dr. Michael McClelland, California Institute of Biological Research, 11099 North Torrey Pines Road, La Jolla, CA 92037.**

The California Institute of Technology, Division of Engineering and Applied Science, invites applications for:

THE MYRON A. BANTRELL POSTDOCTORAL FELLOWSHIP FOR SCIENTIFIC AND ENGINEERING RESEARCH

The fellowship is restricted to U.S. and Israeli citizens and is intended for those who have just completed their Ph.D. It can be in any field of research pursued within Caltech's Division of Engineering and Applied Science. No individual field has priority. The duration of the fellowship is 1 year beginning in the fall or winter of 1990.

The fellowship carries a competitive stipend, a \$1000 research grant, and one-way travel expenses to Pasadena.

To apply, candidates should submit a curriculum vitae, bibliography, copies of selected publications, and a statement describing his or her research interests. Candidates should also arrange to have three letters of recommendation sent directly to:

**Paul C. Jennings, Chairman
Division of Engineering and Applied Science
California Institute of Technology
Pasadena, CA 91125**

The deadline for completed applications is 8 January 1990.

The Institute is an Equal Opportunity/Affirmative Action Employer and welcomes applications from women and minorities.

FELLOWSHIPS

AMERICAN MUSEUM OF NATURAL HISTORY FELLOWSHIPS AND GRANTS

FELLOWSHIPS—American Museum of Natural History Research/Museum Fellowships are available to postdoctoral researchers and established scholars starting in summer and fall 1990. Areas include vertebrate and invertebrate zoology, paleozoology, anthropology, mineral sciences, and the field of museum education as it relates to natural history museums or planetariums. Deadline for applications, including Chapman Fellowships (ornithology), is 15 January 1990.

GRANTS—American Museum of Natural History Grants are available to advanced predoctoral candidates and recent postdoctoral researchers in the fields of zoology and paleontology. Awards range from \$200 to \$1000. Deadline dates vary for each Grant Program.

- **Frank M. Chapman** (ornithology)—15 January 1990
- **Theodore Roosevelt** (N.A. fauna)—15 February 1990
- **Lerner-Gray** (marine)—15 March 1990.

Request information booklet and applications from: **The Office of Grants and Fellowships, Department H, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024.**

PRE- AND POSTDOCTORAL FELLOWSHIPS IN RESPIRATORY BIOLOGY HARVARD SCHOOL OF PUBLIC HEALTH

Program areas include airway physiology and pharmacology, macrophage biology, respiratory muscles, mechanisms of lung injury and environmental disease, respiration mechanics, fluid dynamics, tissue elasticity, and aerosol deposition and clearance. Appropriate backgrounds include physiology, cell biology, engineering, or other biomedical sciences. *Women and minority candidates encouraged.* Please contact: **Dr. Joseph Brain, Respiratory Biology Program 1-1302S, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115. Telephone: 617-732-1191.**

FELLOWSHIPS

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

available immediately in the areas of: (i) The neuro-virology and -immunology, -endocrinology, -pathology, -psychiatry, and -psychology of HIV and AIDS; (ii) the epidemiology of CNS HIV infection and AIDS; (iii) the role of psychosocial and emotional co-factors in the natural history of HIV infection; (iv) the passage of anti-viral drugs through the blood-brain barrier. Eligibility: U.S. citizens or permanent residents. M.D., D.O., and completion of accredited residency, Ph.D. or equivalent. National Institute of Mental Health stipend plus supplement. Send curriculum vitae, three letters of reference, research proposal in area of interest to: **Dr. Herbert Weiner, C8-861, Neuropsychiatric Institute, University of California, Los Angeles, 760 Westwood Plaza, Los Angeles, CA 90024-1759.** *UCLA is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS IN GAMETE AND EMBRYO BIOLOGY AT THE UNIVERSITY OF WISCONSIN-MADISON

Postdoctoral fellowships for research training on the biochemistry and cell and molecular biology of gametes, fertilization, and early development are available at the University of Wisconsin-Madison under the terms of a newly awarded NIH Training Grant. Training faculty members are Roy Ax, Barry Bavister, Neal First, Henry Lardy, and Gerald Schatten. Research topics include: proteoglycans and differentiation of reproductive cells; sperm fertilizing ability and the regulation of embryogenesis; embryo cloning and gene transfer; metabolic processes in gametes and embryos; and motility and architectural changes during fertilization and early development. Applications should include curriculum vitae, three letters of recommendation, reprints or preprints, and a two- to three-page research proposal, and should be submitted to: **Dr. Gerald Schatten, Gamete and Embryo Biology Training Program, University of Wisconsin-Madison, 1117 West Johnson Street, Madison, WI 53706.** *The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.*

NATIONAL INSTITUTES OF HEALTH FELLOWSHIP IN BRAIN LIPID METABOLISM

The Laboratory of Neurosciences, National Institute on Aging, Public Health Service, National Institutes of Health, invites applications for a Staff Fellowship position to study brain lipid metabolism in relation to development and aging. Research opportunities include:

- 1.) Examination of incorporation of precursors of brain lipids in animals in vivo, using quantitative pharmacokinetic and autoradiographic techniques
- 2.) Applying methods for subcellular and chemical fractionation of brain lipids
- 3.) Examining intermediary brain lipid metabolism
- 4.) Examining lipid composition of the human brain in relation to aging and Alzheimer's disease.

The position is that of a Staff Fellow, Senior Staff Fellow or Medical Staff Fellow, with salary commensurate with qualifications. Appointments vary in duration from 2 to 7 years and are tenure-track. The position is located in Bethesda, Maryland, and is available immediately.

Applications are invited from qualified individuals having a Ph.D., M.D., or combined degrees, and pertinent research experience. Applications from women and minorities are invited. Interested candidates should submit their Curriculum Vitae and two letters of recommendation to:

**Dr. Stanley I. Rapoport, M.D.
Chief, Laboratory of Neurosciences
National Institute on Aging, NIH
Building 10 Room 6C103
9000 Rockville Pike
Bethesda, Maryland 20892**



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FELLOWSHIPS

FELLOWSHIPS. Stanford University's Center for International Security and Arms Control announces 1-year fellowships designed to provide mid-career scientists an opportunity for study in problems related to international security, defense policy and planning, and arms control starting fall 1990. Application deadline is 16 February 1990. For information contact: **David Bernstein**, 320 Galvez Street, Stanford, CA 94305-6165.

POSTDOCTORAL FELLOW

To investigate the molecular mechanisms controlling the growth, development, and response of the sympathetic nervous system, focusing on the mechanisms of action of growth factors on chromaffin cells. Experience in the measurement of protein kinase activities, Northern and Southern blots, HPLC phosphopeptide analysis, gel electrophoresis, or the use of monoclonal antibodies preferred. Contact: **Dr. Rick Vulliet**, Department of Veterinary Pharmacology, University of California, Davis, CA 95616. Telephone: 916-752-7409.

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

TRAINEESHIPS

The Basic Science Departments (Cell Biology and Neuroanatomy, Biochemistry, Microbiology, Pathology, Pharmacology, Physiology), Medical School, University of Minnesota, periodically have openings for **POSTDOCTORAL TRAINING**.

For information about possible openings in these programs, write, specifying department of interest, to:

University of Minnesota Medical School
Box 293 UMHC
420 Delaware Street, S.E.
Minneapolis, MN 55455
Attention: James C. Nelson

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

TRAINING PROGRAM

PRE- AND POSTDOCTORAL TRAINING IN IMMUNOLOGY at Boston University School of Medicine. Areas of research specialization include lymphokine action, growth control of T and B cells, autoimmunity, neuroimmunology, aging, genetic engineering of immunoglobulin, expression of myc and IL-1 genes, and studies of HIV biology. Ph.D. program openings for June and September 1990. Applicants must be eligible for NIH training grant support. Direct inquiries to: **Richard Miller**, Department of Pathology, Boston University, 80 East Concord Street, Boston, MA 02118.

COURSE

THE 1990 JAMES S. McDONNELL FOUNDATION SUMMER INSTITUTE IN COGNITIVE NEUROSCIENCE. The third annual Summer Institute will be held at Dartmouth College, 2 July through 13 July 1990. The 2-week **COURSE** will examine how information about the brain bears on issues in cognitive science, and how approaches in cognitive science apply to neuroscience research. A distinguished international faculty will lecture on current topics in perception and language; laboratories and demonstrations will offer practical experience with cognitive neuropsychology experiments, connectionist/computational modeling, and neuroanatomy. At every stage, the relationship between cognitive issues and underlying neural circuits will be explored.

The Institute directors will be **Michael Gazzaniga**, **George A. Miller**, **Wolf Singer**, and **Gordon Shepherd**. The foundation is providing limited support for travel expenses and room/board. Applications are invited from beginning and established researchers and must be postmarked by 12 January 1990. For further information please write to:

McDonnell Institute in Cognitive Neuroscience
Michael S. Gazzaniga
HB 7915-A
Dartmouth Medical School
Hanover, NH 03756

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1-6. *Science* is published weekly on Friday, except the last week in December, at 1333 H Street, NW, Washington, DC 20005. Date of filing: 20 October 1989. This is also the address of the publisher, the editor, and the managing editor, who are, respectively, **Richard S. Nicholson**, **Daniel E. Koshland, Jr.**, and **Patricia A. Morgan**.

7. The owner is American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Stockholders: None.

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I certify that the statements made by me above are correct and complete. (signed) **John Colson**, Director, Membership/Circulation.

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The MBL announces **SUMMER RESEARCH SUPPORT OPPORTUNITIES FOR YOUNG INVESTIGATORS** (postdoctoral, instructors, and assistant professors) for studies to be carried out **at the MBL**.

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• **Robert Day Allen** - cell motility and cytoarchitecture; • **Frederik B. Bang** - marine invertebrate immunology, pathology, infectious diseases, and molecular biology; • **H. Burr Steinbach** - cell biology and physiology; • **M.G.F. Fuortes** - neurosciences; • **Stephen W. Kuffler** - neurobiology.

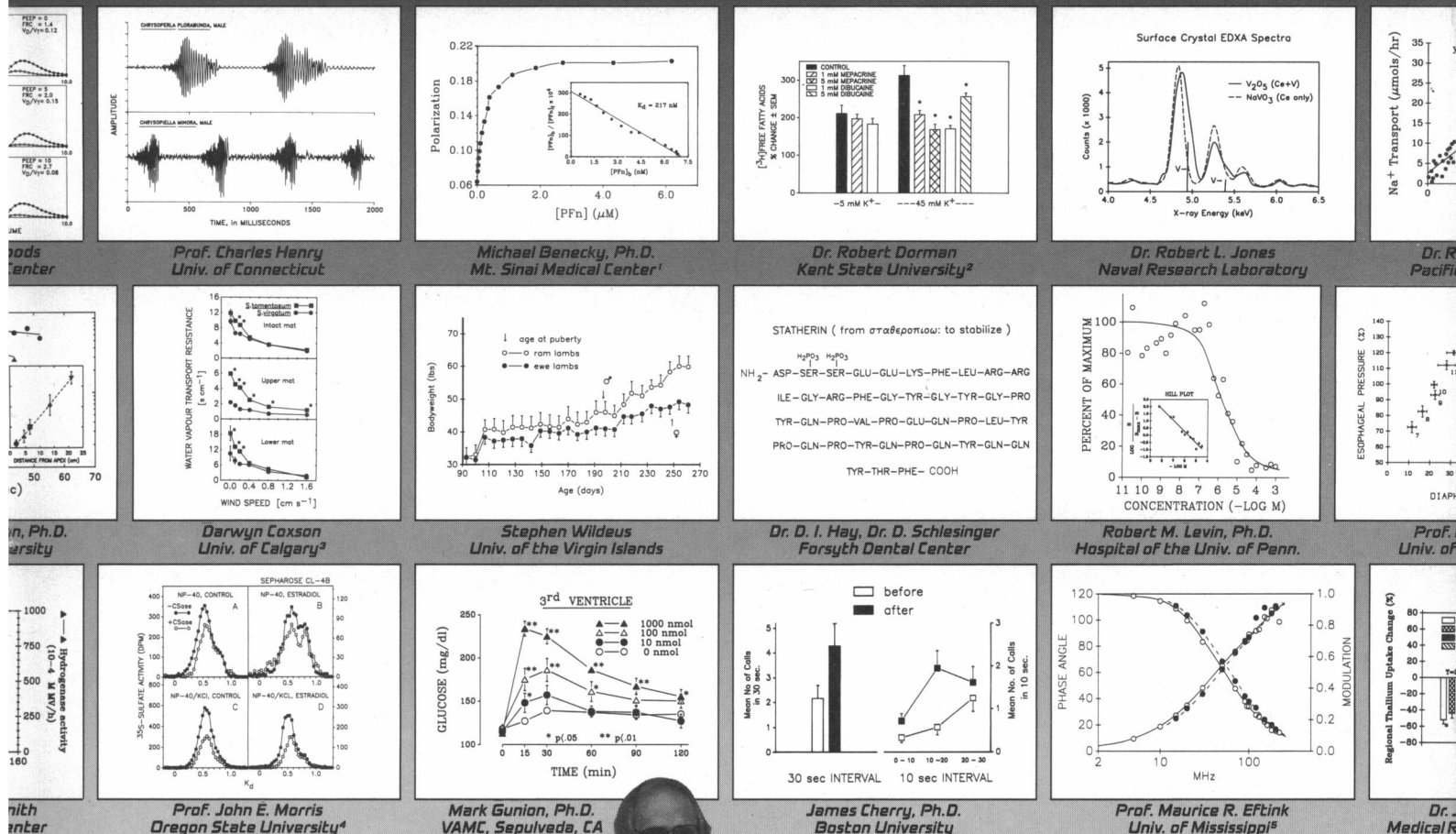
In addition, the following opportunities are available:

• **The Porter Fellowship for Minority Students/Investigators** - to do research in the field of physiology with senior investigators at the MBL; • **MBL Summer Fellowships** - to conduct independent or collaborative research in any area; Applications are reviewed by the MBL Fellowship Committee. Application deadline for Fellowships and Laboratory Space Rental is January 16, 1990. Notification of decisions by March 1, 1990.

For application forms and additional information, contact:
**Office of Sponsored Programs, Marine Biological Laboratory,
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