PERSONNEL PLACEMENT

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing, no abbreviations. Any deficiency in ad must be at least 2 weeks after date of issue in which ad appears. Also, personnel ads are printed only with the understanding that the advertiser does not discriminate among applicants on the basis of sex, religion, age, color, national origin, handicap, or sexual preference. SCIENCE reserves the right, in its discretion, to decline to publish advertisements submitted to it.

LINE CLASSIFIED ADVERTISING DEADLINES:
Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date for deadline for display advertising; please contact Scharago Associates).

POSITIONS WANTED:

402 per word, plus $4 for use of box number, per week. $10 minimum, per week. Prepayment required. This rate is available only to individuals seeking jobs. After 1 January 1990, the rate will be $10 1/8 per word. $5 for use of box number. $15 minimum per week.

LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth):
$40.00 per line; $400 minimum, per week, until 31 December 1989; ads for appeal after 1 January 1990, per line, $410 minimum. Minimum charge covers one inch on a single column; one inch equals 10 lines of type. $410 minimum for spaces per line. No charge for use of box number. No agency commission for ads less than 4 inches. No cash discount. Prepayment required for all foreign ads. Purchase orders required for all other advertising.

To ESTIMATE ad cost:
Scharago Associates will prepare a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, is counted as full lines. Characters within the text are printed in boldface caps and are only 32 characters per line. To ESTIMATE the cost, multiply total lines x $40 = approximate cost of ad. For ads to appear after 1 January 1990, multiply total lines x $41 (This is an approximate cost ONLY. Now for calculation between estimated lines and actual typeset lines and the resulting 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. on Tuesday ONE week prior to issue date. Cancellations must be in writing.

Send copy for all Positions Wanted ads and Line Classifieds, MARKETPLACE, and so forth, to:
SCIENCE Classified Advertising
1323 H St, NW, Room 940
Washington, DC 20005
Telephones: 202-326-6225
FAX: 202-622-0816

Send copy for Fractional Display ads, 1/4 page and larger, to:
Scharago Associates, Inc.
1515 Broadway
New York, NY 10036
Telephone: 212-720-1050
FAX: 212-382-3725

Blind ad replies should be addressed as follows:
Box (give number) SCIENCE
1333 H Street, NW
Washington, DC 20005

POSSESSION WANTED

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

Cellular Pharmacologist, Ph.D. 14 years experience directing development and implementation of an academic drug discovery program for developing potential antiviral drugs at a prestigious research university. Graduate teaching, grants, and publications experience. Requires "career adjustment," possibly to a team context, academic, industrial, private, and government opportunities. Box 224, 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, Instituto Malattie Infettive, Universita di Torino, Corso Stuarti 164, 10149 Torino, Italy.

Neuropathologist/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; transgenic surgery. Twenty English journal articles in last 4 years. Extensive research, clinical, and teaching experience. Box 220, SCIENCE.


Ph.D. 1 have 8 years of experience in the diagnostics industry. I have taken over 20 products from the laboratory 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, ELISA, immunoradiometric assay, HPLC, immunochromatographic and other bioassays, ELISA and polyclonal antibodies. Immunoenzymaassay development. Synthetic organic chemistry and conjugation of carbohydrate derivatives, haptenes and enzymes. NMR, GC, and mass spectrometry, Phospholipid and aminocyclitol 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.


Research Physician, M.D. (aerospace medicine), 35 years old, Indian, enthusiastic, 3 years of postdoctoral experience. Trained in epidemiology, worked in crew and space medicine research, in development of space sickness. Projects. Currently NASA-NRC research fellow on extravehicular activity profiles. Excellent references and scientific papers. Seeks challenging position in aerospace/industrial position, potential need to learn new techniques, can relocate. Box 226, SCIENCE.

ACID RAIN MONITORING PROJECT/RESEARCH SCIENTIST. The Acid Rain Monitoring Project seeks a research scientist to help statistically analyze a quality-controlled chemical database on 3700 surface waters. Expertise in dBase, SAS, program development in environmental chemistry and related fields. Responsibilities include operation of ARCI/EN 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 a genuine interest 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 include teaching and advising courses in 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. The position should be completed 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 a 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-diverse communities, and sections of biology for nonmajors. Preference given applicants who are strong teachers with desire to develop course and research projects. Submit application to: Dr. Norman Hughes, Natural Science Division, Pepperdine University, Malibu, CA 90263. Pepperdine is an Equal Opportunity/Member-American Christian University, a 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 vertebrate biology, ecology, behavior, chemical ecology, biotechnology, and toxicology. Must have a Ph.D., a record of achievement in research, and commitment to teaching at the undergraduate and graduate levels. Must teach a course in vertebrate physiology, a course in vertebrate histology, and a course in one area of expertise (vertebrate histology desirable), and contribute to graduate and undergraduate curriculum. Must develop strong research program, advise undergraduate, M.S. and Ph.D. students, and assume faculty responsibilities at the undergraduate and college levels. Academic year appointment starts 1 September 1990. Salary based on training/ experience. Send letter of application, resume, transcripts, and three letters of reference by 1 Decem-
AQUATIC TOXICOLOGIST
Clemson University

Applications are invited for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level effective on or after January 1990. Development of a research program in aquatic toxicology, participation in a team-taught introductory course in aquatic toxicology, and development of an advanced course in aquatic toxicology are expected. Evidence of research accomplishments is desirable. The research component of this appointment will be with the Institute of Wildlife and Environmental Toxicology, 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, Lehotay 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, herpetology, ichthyology, 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 duties, and exhibition responsibilities as appropriate.

Salary will be commensurate with qualifications and experience. The position requires doctorate and postdoctoral experience. The candidate is expected to develop and coordinate taxonomic research programs and to participate in the larger museum activities. The successful candidate is expected to participate in the department's large and expanding Ph.D. program. In accordance with Canadian immigration requirements prior to appointment the successful candidate should have completed all requirements for the Ph.D. by time of appointment.

Applications should be submitted 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 Neurosciences Research Unit of the Department of Psychiatry, University of Vermont (UVM) College of Medicine. Applicants from qualified Ph.D.'s with strong research credentials in molecular biology and biochemistry in fields related to the neurosciences are encouraged. The successful candidate 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 at least 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

ANALYTICAL CHEMIST
To work in hypertension research program. Applicant must have experience with protein purification and characterization, HPLC, analysis of catecholamines and metabolites, and molecular biology techniques, and in the supervision of laboratory personnel. Beginning salary $20,000. Applicants with experience at assistant professor level or higher are encouraged. Application is through the Department of Cardiovascular Diseases, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294; Attention: Donna Cline. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR
MOLECULAR BIOLOGY

We invite applications for a tenure-track position in the Department of Biochemistry and Molecular Biology 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. Peter W. Driscoll, Rosenstiel Basic Medical Sciences Research Center, Brandeis University, Waltham, MA 02254-9110. The deadline for application is 31 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 ablation methods in the treatment of patients with coronary heart disease. Educational requirements are an M.D. degree, clinical training in cardiology, and a Ph.D. or M.S. in relevant animal models in the evaluation of mechanisms responsible for restenosis after coronary artery angioplasty and other interventional methods. The successful candidate will be expected to participate in the training of medical students, residents, and fellows. The position is expected to begin in September 1990. Salary is open. A strong commitment to research and clinical excellence is required. The University of Texas at Houston is an Equal Opportunity/Affirmative Action Employer.

The Department of Microbiology, University of British Columbia invites applications from molecular immunologists for an open rank level, tenure-track position. The individual we seek will have a Ph.D. postdoctoral experience, a strong research record, and show potential for 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 prior to arrival the successful candidate should have completed all requirements for the Ph.D. by time of appointment.

Applications should be submitted by 15 January 1990: a letter of application with a brief statement of research objectives, curriculum vitae, complete bibliography, and three references. Submit to:

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 open rank level, tenure-track position. The individual we seek will have a Ph.D. postdoctoral experience, a strong research record, and show potential for 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 prior to arrival the successful candidate should have completed all requirements for the Ph.D. by time of appointment.

Applications should be submitted by 15 January 1990: a letter of application with a brief statement of research objectives, curriculum vitae, complete bibliography, and three references. Submit to:

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

CANCER RESEARCH, INSTRUCTOR/ASSISTANT PROFESSOR. Tenure-track position for cancer research with experience in cell biology and molecular genetics. Application deadline 30 November 1989. Contact: Mr. William M. Smith, Department of Biochemistry, University of Texas Medical School at Houston, 6431 Fannin Street, Houston, Texas 77030. The University of Texas Medical School at Houston is an Equal Opportunity/Affirmative Action Employer.

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, herpetology, and soil biology, to contribute to current interests in sustainable agriculture and global food issues.

Applications from qualified individuals who have completed a B.A. or B.S. degree in botany or a closely related field by fall of 1990. Doctorate and teaching experience are preferred. Preference may be given to applicants received by 7 December 1989. Send application, curriculum vitae, and three letters of reference to:

Cinde Marinielli
Box SC-270
College of the Atlantic
Bar Harbor, ME 04609

An Equal Opportunity/Affirmative Action Employer.
The Department of Cell and Development Biology of the Department of Molecular and Cell Biology of the University of California, Berkeley, invites applications for an ASSISTANT PROFESSOR to be effective July 1990 (pending budgetary approval). Persons with Ph.D. degrees and a strong theoretical/ experimental background in cell biology are encouraged to apply. Interested persons should submit a curriculum vitae, three letters of reference, and a statement of research and teaching interests by 1 December 1989. Please send nominations to: Dr. Vito G. Del Vecchio, Search Committee, Department of Cell Biology, University of California, Berkeley, CA 94720. The University of California is an Affirmative Action/Equal Opportunity Employer. The Department invites applications for an ASSISTANT PROFESSOR in the Department of Cell Biology, University of California, Berkeley. The position is at the Assistant Professor level and will carry a strong commitment to teaching and research in molecular and cell biology. The successful candidate will be expected to establish a research program and will have a demonstrated ability and a strong theoretical background in molecular biology. The duties of this position include: establishing a research program, supervision of graduate students and postdoctoral fellows, and teaching service design and teaching at the undergraduate and graduate levels. At least one 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 Biology, University of Illinois at Urbana-Champaign, invites applications for a tenure-track position at the assistant professor level to begin September 1990, pending budgetary approval. Applicants should have a Ph.D. degree in molecular and cell biology or a closely related discipline. The successful candidate should be expected to establish a research program and to contribute to teaching in cell biology. Interested persons should submit a curriculum vitae, statement of research interests, and the names and addresses of three references by 15 December 1989. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

Assistant Professor

The Department of Cell Biology and Molecular Genetics of the University of Michigan, Ann Arbor, invites applications for a tenure-track position at the assistant professor level to begin July 1990. The successful candidate will be expected to establish a research program and to contribute to teaching in cell biology. Interested persons should submit a curriculum vitae, statement of research interests, and three letters of reference. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

Assistant Professor

The Department of Cell Biology of the University of Texas Southwestern Medical School, Dallas, Texas, invites applications for a tenure-track position at the assistant professor level to begin July 1990. The successful candidate will be expected to establish a research program and to contribute to teaching in cell biology. Interested persons should submit a curriculum vitae, statement of research interests, and three letters of reference. The University of Texas Southwestern Medical School is an Equal Opportunity/Affirmative Action Employer.

Assistant Professor

The Department of Microbiology, Immunology, and Molecular Genetics of the University of California, Davis, invites applications for a tenure-track position at the assistant professor level to be appointed in any one of the following areas: molecular biology, cell biology, or biochemistry. Applications will be considered at any time, pending budgetary approval. The successful candidate will be expected to establish a research program and to contribute to teaching in one of these areas. Interested persons should submit a curriculum vitae, statement of research and teaching interests, and three letters of reference. The University of California, Davis, is an Equal Opportunity/Affirmative Action Employer.

Assistant Professor

The Department of Biochemistry of the University of Colorado, Boulder, invites applications for a tenure-track position at the assistant professor level to begin July 1990. The successful candidate will be expected to establish a research program and to contribute to teaching in biochemistry. Interested persons should submit a curriculum vitae, statement of research and teaching interests, and three letters of reference. The University of Colorado, Boulder, is an Affirmative Action/Equal Opportunity Employer.

Assistant Professor

The Department of Biochemistry of the University of Wisconsin-Madison invites applications for a tenure-track position at the assistant professor level to begin July 1990. The successful candidate will be expected to establish a research program and to contribute to teaching in biochemistry. Interested persons should submit a curriculum vitae, statement of research and teaching interests, and three letters of reference. The University of Wisconsin-Madison is an Equal Opportunity/Affirmative Action Employer.

Assistant Professor

The Department of Pathology of the University of Arkansas for Medical Sciences, Little Rock, Arkansas, invites applications for a tenure-track position at the assistant professor level to begin July 1990. The successful candidate will be expected to establish a research program and to contribute to teaching in pathology. Interested persons should submit a curriculum vitae, statement of research and teaching interests, and three letters of reference. The University of Arkansas for Medical Sciences is an Equal Opportunity/Affirmative Action Employer.

Assistant Professor

The Department of Pharmacology of the University of Texas Southwestern Medical School, Dallas, Texas, invites applications for a tenure-track position at the assistant professor level to begin July 1990. The successful candidate will be expected to establish a research program and to contribute to teaching in pharmacology. Interested persons should submit a curriculum vitae, statement of research and teaching interests, and three letters of reference. The University of Texas Southwestern Medical School is an Equal Opportunity/Affirmative Action Employer.
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, 100 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.

UNIVERSITY OF NEW YORK AT BUFFALO

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 related to hybridoms, 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 Employees Services, Department EF, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. We are an Equal Opportunity Employer.

Roche Diagnostic Systems
a subsidiary of Hoffmann-La Roche Inc.

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)

BIOLIST

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, PO. Box 400, Princeton, NJ 08540. An Equal Opportunity Employer.

THE COMMITMENT GROWS EVERY DAY.
ASSISTANT OR ASSOCIATE PROFESSOR, BACTERIOLOGY/RHIZOSPHERE BIOLOGY. The University of Georgia invites applications for a tenure-track assistant or associate professor position with research and teaching responsibilities in the area of microbiology. The University of Georgia is an Equal Opportunity/Affirmative Action Employer. Deadline: 30 August 1989.

The Department of Pathology, Surgery, and Microbiology at the University of Georgia invites applications for a position in the area of microbiology. The successful candidate will have a strong interest in research and be able to develop a new research program. The University of Georgia is an Equal Opportunity/Affirmative Action Employer. Deadline: 15 November 1989.

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 assure 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, resume, and telephone numbers of five references by 15 December 1989 to: Dr. James Osborn, Chairman, Search Committee, Oklahoma Agricultural Experiment Station, Oklahoma State University, Stillwater, OK 74078. Telephone: 405-744-6161. Oklahoma State University is an Equal Opportunity/Affirmative Action Employer.
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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)
NIHES Personnel Office
P.O. Box 12233
Research Triangle Park, NC 27709

NIH is an equal opportunity employer.

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.
**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 multiple-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

**CARTER-WALLACE, INC.**

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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**

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**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 archaebacteria. 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.

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**Add your skills to our long list of achievements.**

**Cardiovascular Research**

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 anesthesiology 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.
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, including confidence to:

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

The University of Virginia
Beirne Carter Center for 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

The University of Virginia is an Equal Opportunity/Affirmative Action Employer

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. R51, 4901 Searle Parkway, Skokie, IL 60077. An Equal Opportunity Employer M/F/H.

SEARLE
Together, we can do a world of good.

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.

GenPharm International
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. Qualification: Ph.D., M.D., or equivalent and degree and extensive research experience. Applicants must have achievements in attracting extramural funding and in sustaining viable research programs. Experience in advanced education, guidance of graduate students, and a record of successful cooperative research and important characteristics. Excellent interpersonal, written, and oral communications skills are essential. The desired candidate must have demonstrated leadership abilities and is expected to satisfy professional 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. A 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. Degree: Ph.D. or equivalent and degree and extensive research experience. Experience in advanced education, guidance of graduate students, and a record of successful cooperative research and important characteristics. Excellent interpersonal, written, and oral communications skills are essential. The desired candidate must have demonstrated leadership abilities and is expected to satisfy professional 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. A affirmative Action/Equal Opportunity Employer.

BIOLOGICAL OCEANOGRAPHER

The Department of Organismic and Evolutionary Biology and the Committee on Oceanography at Harvard University seeks to fill a tenure-track position in biological oceanography as part of the biology, tenured-track position in biological oceanography at the rank of ASSOCIATE 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 phycology at the introductory level. Applicants should send curriculum vitae, statement of research interests, and the names of three references to: James J. McCarthy, Chairman, Department of Organismic and Evolutionary Biology, 1200 Massachusetts Ave., 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 curriculum vitae, references, and a resume 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 is requested to submit a 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. The research emphasis is in the isolation and characterization of molecules that participate in key cellular and viral processes such as: transcription, translation, cycle regulation of RNA maturation, stress response, cell differentiation, biofilm or mammalian assembly. We prefer to fill these two positions with one person having an emphasis on biochemical ontological development and one with a special focus on protein/peptide chemistry. The positions would be at the level of ASSISTANT PROFESSOR and could begin as early as fall of 1990. Applicants should submit curriculum vitae, a bibliography, a two-page outline of research objectives, a summary of teaching experiences, copies of two representative publications, and names of three references to: 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.
Procter & Gamble’s
UNIVERSITY
EXPLORATORY RESEARCH PROGRAM

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
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
UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) DEPARTMENT OF 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 several references to:

Dr. James Paulson
Chair, Search Committee
Department of Biological Chemistry
University of California
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. The Department of Biology has full-time faculty members and advanced courses in the above areas, a junior seminar, and participation in Allegheny’s Liberal Studies program. Additional courses, both undergraduate and graduate, may be filled by either or both positions, is the ability to teach biostatistics and comparative anatomy. In addition to teaching, successful candidates will develop research programs and direct 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. The successful applicant must have a Ph.D. in Biology or a closely related discipline, and 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 Wuest, 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 BIOLOGY UNIVERSITY OF ILLINOIS

The Department of Biochemistry at the University of Illinois is seeking candidates for a faculty position to be filled by a researcher specializing in the study of biological macromolecules by high-resolution NMR spectroscopy. The position will 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 the potential for establishing or have already established an independent research program. The university and the department have a strong commitment to equal opportunity programs and 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 level. The starting salary is competitive and dependent upon the experience and qualifications of the applicant. The Department of Biochemistry has full-time faculty members and Ph.D. students and faculty members from all areas working with joint appointments. There are approximately 180 doctoral students, 50 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, 522 North Goodwin Avenue, Urbana, IL 61801; telephone: 1–703–335–9075.

Applications 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.

BIOCHEMISTRY, Ph.D. Either a postdoctoral position for a recent graduate or a research scientist position for a Ph.D. with a strong background in biochemistry and molecular biology are 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 biochemical methods is essential. The position involves participation in the development and evaluation of 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 44195–2518. 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: Research experience in cardiovascular physiology with 2 to 3 years of postdoctoral experience is required. Research interest involved: (i) chemical paleobiology, (e.g., trace element/isotope biochemistry, paleoecological model (ii) Biogeochemistry, sediment biology, trace metal geochemistry, sediment transport processes, fluvial fluid dynamics, geohistory). Appointment effective 1 July 1989.

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

Submit names and addresses of four references, current curriculum vitae, and statement of research interests to: Chair, Search Committee, Department of Biology, University of California, San Diego, 92122–0057. Applications from women, ethnic minorities, and disabled individuals are especially encouraged. SDSU is an Affirmative Action/Equal Opportunity Employer.

COMPARATIVE PHYSIOLOGIST. The Department of Biology at San Diego State University (SDSU) invites applications for a tenured-track faculty position at the ASSISTANT, ASSOCIATE OR FULL PROFESSOR level. Specific research expertise may be in 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; establish new or expand existing courses on a background; participate in the training of M.S. and Ph.D. students. Start-up funds competitive with other institutions. 7 December 1989 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.

CHEMICAL PALEOBIOLOGY OR QUANTITATIVE BIOLOGY. The Department of Geology, University of North Carolina–Chapel Hill, invites applications for a tenure-track, ASSISTANT PROFESSOR position (senior appointment possible for qualified candidates with significant research experience). Research interest involved: (i) chemical paleobiology (e.g., trace element/isotope biochemistry, paleoecological models (ii) Biochemicals in sedimentary rocks, sedimentary geochemistry (e.g., sediment transport processes, fluvial fluid dynamics, geohistory). Appointment effective 1 July 1989.

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

Submit names and addresses of four references, current curriculum vitae, and statement of research interests to: Dr. P. G. Feiss, Chairman, Mitchell Hall CBA # 3311, 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.

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 chemistry and physics. Candidates should have research experience in 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 core content, interdisciplinary curriculum, collaborative learning, and broad awareness of environmental and other social and global issues, as well as skills in critical thinking, experimental design, and computer literacy. Successful applicants should be committed to working with faculty and students who are interested in environmental issues and other subjects of special interest to them. Applications that exemplify another special interest will be especially encouraged.

Closing date for applications is 21 December 1989. Include curriculum vitae, statement of teaching experience, research interests, descriptions of general education courses you have taught, and at least three letters of reference. Application materials should be forwarded to: Dr. 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.

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 a specialty area. Strong commitment to undergraduate teaching and involving undergraduate students in research is required. Ph.D. required. Rank and salary are negotiable. The Department of Biology at St. Mary’s College of Maryland is a state-supported, liberal arts college with 1500 students. The college’s waterfront campus is located in St. Mary’s City, MD 20686, approximately 45 miles south 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 Gibbons, 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.
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. RV 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. Department of Biochemistry, University of Washington, Seattle, Washington, is seeking an investigator to conduct research on the evolution of vertebrate reproductive systems. The successful candidate will work with colleagues to investigate the genetic and molecular mechanisms underlying the evolution of vertebrate reproductive systems. This is an opportunity to contribute to the understanding of the evolutionary processes that have shaped the diversity of life on Earth. Please send a letter of interest, a CV, and a list of three references to Dr. Betsy Peitz, Search Committee, Department of Biochemistry, University of Washington, Seattle, WA 98195. Application deadline: 15 June 2000. EOE/AA/ADA.

DEAN COLLEGE OF BASIC SCIENCES, UNIVERSITY OF KANSAS AND A&M COLLEGE

The College of Basic Sciences at the University of Kansas and Kansas State University, Manhattan, KS, is seeking a Dean to provide leadership and direction for the College. The successful candidate will have a strong commitment to excellence in teaching, research, and service. The candidate should have a Ph.D. degree and at least 10 years of experience in the fields of molecular biology, genetics, or cellular biology. Application materials should be submitted to: Dr. Michael R. Koelling, Chair, Search Committee, College of Basic Sciences, University of Kansas, Lawrence, KS 66045. Application deadline: 15 June 2000. EOE/AA/ADA.

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

NSF's Office of Legislative and Public Affairs seeks qualified applicants to manage division responsibilities for the Foundation's legislative activities. Appointment to this senior executive service position may be on a career or a 2- to 3-year limited term basis with salary range $70,000 to $90,000. 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. Knowledge of public policy and budgetary issues affect 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 FPA of Research and Policy. Send resume, references, and application to: Employment Division, NSF, 4201 Wilson Boulevard, Suite 500, Arlington, VA 22230.

EDITOR

Association Review Editor for weekly, independent, nonprofit 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 social knowledge of social sciences and public policy issues helpful. Apply in letter long enough to demonstrate writing ability. Include resume and salary requirements. Submit to: Gregory Stokes, AAAS, 1333 H Street, N.W., Suite #850, Washington, D.C. 20005. An Equal Opportunity Employer.

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 policy-related activities related to the identification and assessment of risks to human health and natural ecosystems, the design of appropriate policies, and the effective communication between policymakers and the public about these risks and policies. The director will 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 effective research programs; and (iii) can improve this approach; (iii) is experienced in working with the diverse participants in the policy process, in order to develop effective strategies; and (iv) will be effective in broadening the center's funding from government, private foundations, 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 background in the social, natural, or life sciences; law; or engineering. Salary commensurate with experience; excellent benefits. Applicants should send 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 20006. An Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

FACULTY POSITION IN BIOMECHANICS AT NORTHWESTERN UNIVERSITY

The Biomedical Engineering Department at Northwestern University and the Sensory Motor Performance Program of the Rehabilitation Institute of Chicago are seeking candidates to fill a tenure-track position in biomedical engineering at the ASSISTANT PROFESSOR level, for the 2000–91 academic year. The candidate should have expertise in the areas of biomechanics and/or sensory motor performance, with a focus on the development of novel medical devices for reflexology and/or sensory motor performance. The candidate will be expected to establish a high-quality research program in a closely related area. Additional information is available from: Dr. Andrew K. Kopter, Chair, Biomedical Engineering Department, Northwestern University, 2145 Sheridan Road, Evanston, IL 60201. Interested applicants should submit by 1 January 2001: curriculum vitae, outline of future research, teaching interests, and names and addresses of at least three references to: Dr. Andrew K. Kopter, Chair, Biomedical Engineering Department, Northwestern University, 2145 Sheridan Road, Evanston, IL 60201.
**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 labeling 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 B3369
9000 Rockville Pike
Bethesda, Maryland 20892
Telephone: (301) 496-5536

U.S. Citizenship Is Not Required

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

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**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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**Schering**

**Research Scientists**

*If creating cardiovascular or viral therapies is what you have in mind, come to Schering-Plough Research.*

We're a growing $3-billion pharmaceuticals innovator recognized worldwide for our dedication to discovery. Currently we have opportunities for professionals with scientific expertise in the cardiovascular or viral research areas.

**Cardiovascular Research:**

**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.

**What you have in mind, we put in action.**
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, #80121, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

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. The Department is 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 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.

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

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/V, 3401 Hillview Avenue, Palo Alto, CA 94304. An 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 ScI 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 estimating requirements to ground system elements, and actual implementation of those ground system elements allocated to the ST ScI. During flight operations, the Division will also be responsible for engineering analyses and recommendations for improving overall observing efficiency. The ST ScI 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 Teley, Personnel Officer, Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, Maryland 21218. ST ScI is an equal opportunity/affirmative action employer. Minorities and females are strongly urged to apply M/F/H/V.

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 behavior, aggregation and adsorption; and elucidating degradation pathways and techniques for isolation of degradation products.

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 1-3 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-214.

Research Scientist Virology & Oncopharmacology

Successful candidate will be responsible for developing and running acellular and cellular molecular assays to study the effects of novel antiviral nucleoside analogs on gene expression at the level of transcription and 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.

STERLING RESEARCH GROUP
A Subsidiary of Eastman Kodak Company
Build A Future With Sterling.
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 experience in clinical poultry health problems required. Receipt of applications with three references is 1 February 1990. Direct inquiries to: Dr. S. H. Kleven, Avian Medicine Department, Georgia State, Athens, GA, 30605. An Equal Opportunity/Affirmative Action Institution.

FACULTY POSITIONS ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE 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 techniques 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. and postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for the development of an independent research program. The department is an active research program. At the tenure level, applicants must have a strong record of research accomplishment. The Department of Biochemistry consists of 60 faculty members. Applications and nominations should include curriculum vitae, a summary of current and future research plans, and the names of at least three individuals for reference. Application deadline is 31 December 1989. Send applications or nominations to: Robert V. Storti, Department of Biochemistry (MC 872), Medical 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 AND PROGRAM IN MOLECULAR 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 OR ASSOCIATE PROFESSOR position at the University of Utah. This position is open to candidates whose research interests and accomplishments consist of work in cell and molecular biology and is able to teach biochemistry effectively. Research interest may include work on any biological processes (in microorganisms, plants, or animals), but the approach should be strongly directed toward cell biology. The 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 cell 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 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.

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 physiologist. Interdisciplinary background will be considered. Receipt of applications with three references is 1 February 1990: curriculum vitae, outline of future research, teaching interests, and names and addresses of at least three references. Send résumé and two course descriptions (letters of recommendation will be required) by 31 January 1990 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.

FACULTY POSITION—DEPARTMENT OF BIOLOGY, St. John’s University, St. John’s, Newfoundland, Canada. Head of Department of Biology. Applications are invited for the position of head, Department of Biology for September 1990. The department has 45 full-time members and approximately 60 support staff and offers undergraduate and graduate programs to the Ph.D. level. Research and teaching are, at present, in the following areas: marine biology, evolution and ecology, parasitology/entomology, cell biology/microbiology. Some faculty hold cross-appointments to the Research Facilities 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 responsive to the diverse requirements of this multidisciplinary department. Address applications (including the names of at least three references) or requests for further information to: Dr. J. E. Strawbridge Associate Dean of Science (Chairman, Biology Headship Committee) St. John’s, Newfoundland, Canada, A1B 3X7 Bitem: JSTRAWBR@MUN.CA Telephone: 709-777-8165 FAX: 709-777-4000 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 RESEARCH ASSOCIATE. Research the behavior of surface atoms of structural ceramic materials (including silicon carbides) exposed to dopants, absorbents, and other growth and/or degradation of materials. Requires graduate students using Ion Scattering Spectrometry (ISS) and Scanning Tunneling Microscopy (STM) tech- niques. Must have Ph.D. in physics, 1 year experience in user-level teaching and research, proven research ability, publications in peer-reviewed journals, and prior experience with ISS and STM techniques. Four-hour week, 8:30 to 5:00, $480 per week per calendar year. Qualified applicants send résumé or application letter by ad 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. if required.

FACULTY POSITION IN BIOMEDICAL ENGINEERING AT UNIVERSITY OF MIAMI DEPARTMENT OF BIOLOGY UNIVERSITY OF MIAMI FACULTY POSITION IN BIOENGINEERING AND BIOMEDICAL SCIENCE Research assistant professor position available in a well-established and funded muscle research group. The laboratory is actively involved in studying the Ca2+ regulation of cardiac and skeletal muscle contraction by peptidom using modern biochemical, biophysical, and molecular biological approaches. Applicants should have a Ph.D. or equivalent degree and experience in biochem- istry, biophysics, or molecular biology. Please send detailed curriculum vitae and names of three references to: Dr. James D. Potter, Professor and Chairman, Department of Cell Biology, 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 towards understanding visual processing from perception to pattern recognition. Although we expect to hire a visual system physiologist, applicants working in other areas will also be considered. Interested individuals should submit curriculum vitae and three letters of reference to: Psychological Search Committee (F. B. Kraus, Chair), Department of Psychology, University of California, Los An- geles, CA 90024–1565. 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 to develop an independent program on vectored diseases and establish basic knowledge about pathogen-vector interactions and their relationship with plant- vector interactions. The need is for a plant physiologist, 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 relationships, and direction of graduate student research. Ph.D. required with experience in plant pathology and/or virology and teaching in these areas. Please send curriculum vitae, a statement of research interests, a description of research efforts, and three letters of reference to: Dr. David J. Gumpf, Search Committee Chairman, Department of Plant Pathology, Universi- ty 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 important marine species. We are most interested in individuals with expertise in population dynamics and/or in shellfish biology. However, we encourage applicants from all specialized fields, including population 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 resume, description of research goals, and three letters of reference by 22 December 1989 to: William M. Wise, Marine Sciences Research Center, SUNY Stony Brook, 11794–5000. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.
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
EXTENSION OF SEARCH NAMED PROFESSORSHIP IN PLANT 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 ex officio Department Chair. The Department of Botany and Microbiology has 20 faculty members, about 50 graduate students, well-equipped teaching and research facilities, and externally funded research programs. The candidate must be an established scholar with research interests in molecular aspects of plant physiology or biochemistry. A strong commitment to teaching is a high priority. The successful applicant is expected to establish an independently funded research program. A highly competent salary, excellent benefits, and rank (as appropriate) with a generous package are offered. Applications must be received by 15 December 1989. Send inquiries to: Dr. John D. McMorris, Chair, Department of Botany and Microbiology, University of Oklahoma, Norman, OK 73019.

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

FACULTY POSITIONS IN PLANT BIOLOGY—TENURE TRACK

The Department of Biological Sciences at the University of Maryland Baltimore County (UMBC) has an opening for a tenure-track position in Plant Molecular Biology. The successful applicant will develop a research program in molecular biology of plants and teach courses in plant biology at the undergraduate and graduate levels. The candidate should have a Ph.D. in plant molecular biology and a strong commitment to teaching at the undergraduate level. The successful applicant will be expected to develop an independently funded research program and to establish a college teaching program. Applicants should send a curriculum vitae and names of three references to: Dr. J. Michael McAlpin, Chair, 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 experience 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 submit updated material and a letter indicating continued interest. Send a resume, description of research program, reprints, and four letters of recommendation to: Dr. Melvin T. Szurszewski, 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

The Cognitive Sciences Department, University of California, Irvine (UCI), invites applications for a five-year tenure-track position at the assistant professor rank. Applicants should have a Ph.D. in cognitive or experimental psychology. The successful candidate will be recruited into the areas of learning and memory, reasoning and decision-making, and cognitive neuroscience. A strong commitment to teaching at the undergraduate level is also necessary. The University of California, Irvine, is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN PHYSIOLOGY

Applications are invited for a tenure-track position at the assistant professor rank. Candidates should have a Ph.D. in physiology and a strong commitment to teaching. A strong record of research accomplishment in the areas of cardiovascular, renal, and membrane physiology is desired. The successful candidate will be expected to develop an independently funded research program and to establish a college teaching program. Applications should be sent to: Dr. Robert K. McCullough, Chair, Department of Physiology, University of California, Irvine, 949-824-2635.

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

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

FACULTY POSITIONS IN PLANT BIOLOGY

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 ex officio Department Chair. The Department of Botany and Microbiology has 20 faculty members, about 50 graduate students, well-equipped teaching and research facilities, and externally funded research programs. The candidate must be an established scholar with research interests in molecular aspects of plant physiology or biochemistry. A strong commitment to teaching is a high priority. The successful applicant is expected to establish an independently funded research program. A highly competent salary, excellent benefits, and rank (as appropriate) with a generous package are offered. Applications must be received by 15 December 1989. Send inquiries to: Dr. John D. McMorris, Chair, Department of Botany and Microbiology, University of Oklahoma, Norman, OK 73019.

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FACULTY POSITIONS IN PLANT BIOLOGY

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

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.

In addition to working on new products or new applications for existing products, these multi-disciplined teams are responsible for exploring the ways in which new products might be manufactured. They initiate pilot plant studies for integrating new product manufacturing processes with existing separation, filtration, and processing facilities.

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.
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.

Amgen offers an excellent compensation and benefits package as well as the unique opportunity to contribute to significant research programs on the leading 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 complete C.V., in confidence, to:

AMGEN, INC.
Recruitment, Dept. #429
Amgen Center
Thousand Oaks
CA 91320-1789

Equal Opportunity Employer

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
An Equal Opportunity Employer M/F

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 99204-3999, (509) 456-3275. WSU is an EO/AA educator and employer. Protected group members are encouraged to apply.

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.

MIT is an equal opportunity affirmative action employer
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**

**Insect Biology**

*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. Applications are due by September 15, 1990. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

**Invertebrate and vertebrate zoologists**

*Applications are invited for two tenure-track positions as the ASSISTANT PROFESSOR level, effective 1 August 1990. Ph.D. required. Teaching responsibilities are two courses per semester in one of the following areas: (1) Comparative Anatomy, Invertebrate Zoology, Animal Ecology, or other in area of specialty). We are seeking individuals with a commitment to undergraduate education and to active involvement of students in research. Research and teaching facilities include recently renovated laboratories, animal room, greenhouse, and SEM. The position is housed in 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. The University of Illinois is an Affirmative Action/Equal Employment Opportunity Employer.*

**Manager of Mass Spectrometry**

*Applications are invited for LECTURER IN PHYSIOLOGY. Applicants are expected to have a medical degree or a Ph.D. in 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 for which it is equipped include: endocrine and reproductive physiology, gastrointestinal physiology and nutrition, muscle physiology, renal and acid-base physiology, as well as somato- sensory 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 HK$265,200 by two increments BAR or HK $280,920 to HK$309,600 by seven increments (approximate exchange rate: £1 = HK$12.05; US$1 = HK$7.87). 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 income is less than HK$300,000. Accommodation overseas terms of service is entitled to have passage benefits for himself/herself and his/her dependents. Applicants are invited to submit a curriculum vitae, a description of research plans, and three letters of reference to: Professor S. C. Wong, Department of Physiology, The University of Hong Kong, Pokfulam Road, Hong Kong. Interview is expected to be held in late May 1990.*

**Molecular Biologist**

*The Department of Biology, 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. J. 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 microbiol- al or cellular molecular geneticist is sought to establish a research and teaching program in his or her subject area. Ph.D. required. Responsibilities also include undergraduate teaching. Forward curriculum vitae, letters of recommendation (three letters of recommendation to: Dr. Sheldon Dobkin, Chairman, Department of Biological Sciences, Florida Atlantic University, Boca Raton, FL 33431. Application deadline is 15 January 1990. FAU is an Affirmative Action/Equal Opportunity Institution.*
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.

UAB Biochemistry & You
Imagine that.

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

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 undergraduate education. The successful applicant will be expected to develop 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. Applications should be in by 1 February 1990. Address to: Dr. Leon C. Wince, Professor and Chair, Department of Chemistry, Williams College, Williamstown, MA 01267.

OCEANOGRAPHER. We intend to hire a tenure-track assistant professor to begin in fall 1990. We desire a candidate with background in physical oceanography, whose training and research will strengthen the links between the chemical and biological oceanographers on our faculty. Early in her/his career she/he will design her/his own research interests, names and addresses of three referees, and a curriculum vitae by 31 December 1989 to: Dr. William C. Burnett, Chairman, Department of Oceanography, Florida State University, Tallahassee, FL 32306. USF is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

PHARMACIST/PHARMACOLOGIST (GS-06600/0405-14). 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 chemo- preventive agents, drug formulation, and labeling. Studies to be supported include clinical trials and pre-clinical studies. Responsibilities include management of contract activities, interface with investigators and government officials, review of lab protocols and development, and direction of pharmaceutical/pharmacological aspects of a new and dynamic program. U.S. citizenship is required. Applicants should submit curriculum vitae and list of publications (or requests for further information) to: Ms. Kathleen Signago, NCI Personnel, Executive Secretary, Room 1-412, Building 5C, 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 physical anthropology, 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, course development. Salary range: $31,668 to $39,924. We are committed to improving faculty diversity and encourage applications from underrepresented ethnic minorities, disabled individuals, and Vietnam-era veterans to be encouraged to apply. Deadline: 1 February 1990. Send letter of application and two letters of recommendation to: Anthropology Search Committee, California State University, Sacramento, 95819-2694. Affirmative Action/Equal Opportunity Employer.

PHARMACOLOGIST/TOXICOLOGY SCHOLARSHIP OF PHARMACY AND 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 participating in University service. The postdoctoral position is an academic year tenure-track appointment. Salary is commensurate with qualifications and experience. Applications will begin in February 1990. Applicants should send a letter of application, a résumé, transcripts, and three letters of recommendation to: Dr. Dave Forbes, Dean, School of Graduate Studies, 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, or neurophysiology. Other areas of specialization will be considered. A priority of our program is on delivering a high-quality education to medical students. The school has special commitments to increasing the number of physicians from presently underrepresented minority groups. The University is committed to developing strong interdepartmental program in plant physiology and plant molecular biology and excellent potential for extensive collaborative research.

PLANT PHYSIOLOGIST

To investigate physiological processes that relate to crop productivity. Extensive training in field applications is essential, as is expertise in molecular approaches to plant physiology, water use efficiency, and pest tolerance. Selection criteria will be developed to evaluate a graduate-level course in modern research approaches to plant physiology and establish a productive research program. Developing strong interdisciplinary 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. Developing strong interdisciplinary program in plant physiology and plant molecular biology and excellent potential for extensive collaborative research.

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 mDNA analysis and SCUBA diving desirable. Salary $23,500. Curriculum vitae and three confidential letters of recommendation should be received by November 1989. Send to: Dr. B. J. Jackson, Smithsonian Tropical Research Institute, BOP 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 Restorative Center. The position involves 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, Haddick Biological Station, Murray State University, Murray, KY 42071.

SCHOOL OF PHARMACY AND HEALTH SCIENCES UNIVERSITY OF MONTANA

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 approaches to microbiology, cellular or molecular aspects of differentiation and development. Applicant 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 to: Dr. Wayne Becker, Chair, Department of Botany University of Wisconsin Madison, WI 53706

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 one group working on the cytoskeleton will be possible. The laboratory is a part of a newly established Center for Structural Biology. Send curriculum vitae and references to: Dr. Kenneth Suzuki, Chairman, Department of Cell Biology and Neuroanatomy, University of Minnesota Medical School, 321 Church Street, S.E., Minneapolis, MN 55455.

POSTDOCTORAL(Position)—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 approaches to microbiology, cellular or molecular aspects of differentiation and development. Applicant 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 to: Dr. Wayne Becker, Chair, Department of Botany University of Wisconsin Madison, WI 53706

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

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 on the receptors for EGF and its binding to intracellular lipotyrosine and mechanism(s) of phosphorylation in signal transduction. Experience with protein purification and analysis and some knowledge of modern DNA methodologies is desirable. Position available immediate or as late as 1 January 1990. Applicants with Ph.D. in biochemistry, cell biology, immunology, or a related area are encouraged to apply. Send curriculum vitae and names of three references to: Dr. Stephen Kaufman, University of Illinois, Department of Microbiology and Cell Biology, 131 Burrill Hall, 407 East Street, Urbana, IL 61801. Telephone: 217-333-3521.

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

POSTDOCTORAL RESEARCH ASSOCIATE

Available immediately. Research involves cloning of hMG/FSH receptor cDNA, and identifying regulatory elements controlling expression. Experience in recombinant DNA techniques and mammalian cell systems is required. Send curriculum vitae, references, and summary of research experience to: Dr. Arnold I. Kaplan, 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.

POSTDOCTORAL RESEARCH ASSOCIATE

Positions are available working with a multidisciplinary research team on aspects of camouflage, 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 an increasingly studied area. Experience with quantitative and qualitative morphometrics and histology, immunocytochemistry, and immunohistochemistry, and cell and organ culture, monoclonal antibodies to cells and other molecules, molecular biology, 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: Dr. Eileen R. Arnold, Office of Admissions, University of California at Los Angeles, Medical Center East, 4200 Executive Office Center, Los Angeles, CA 90024. Equal Opportunity Employer, M/F.
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.

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

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.
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.
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 will participate in intensive laboratory 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. Postdoctoral 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

Graduate Study in Molecular and Cell Biology at Texas A&H 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
POSTDOCTORAL POSITION AVAILABLE: POSTDOCTORAL POSITIONS IN MICRORHEOLOGY at Pittsburgh Energy Technology Center. Research is focused on the role of protein kinase C isoforms in primary cultures of heart, muscle, and skin derived from mice and humans. Send curriculum vitae and names and addresses of three references to: Dr. S. M. Brandt, Department of Biology, Washington University, St. Louis, MO 63130.

POSTDOCTORAL ASSOCIATE IN PLANT MOLECULAR GENETICS. A position is available to study the role of plant transgenic gene expression during wound healing and tissue repair. Offers are now available immediately in the Department of Plant Molecular Biology. The position is supported by a grant from the National Science Foundation. Salaries depend on experience and training. Applications are invited from individuals with a strong background in plant molecular biology. Send curriculum vitae to: Dr. R. S. Baillie, Department of Plant Molecular Biology, University of California, Berkeley, CA 94720.

POSTDOCTORAL POSITION AVAILABLE in circadian neurobiology at Indiana University to study the functional organization of the hypothalamic suprachiasmatic nucleus. Individuals interested in this area are encouraged to apply. Applications should be submitted immediately. Address inquiries to: Dr. J. L. Young, Department of Neurobiology, Indiana University, Bloomington, IN 47405. Salaries are commensurate with experience and training. Applications are invited from individuals with a strong background in circadian neurobiology. Send curriculum vitae to: Dr. J. L. Young, Department of Neurobiology, Indiana University, Bloomington, IN 47405.

POSTDOCTORAL POSITIONS IN PHARMACOLOGY AND BEHAVIORAL NEUROPHARMACOLOGY are available immediately in the Laboratory of Pharmacology and Behavioral Neuropharmacology at the University of Texas at Austin. The laboratory is interested in the role of neurotransmitters and neuroactive drugs in the regulation of behavior. Salaries are dependent on experience and training. Applications are invited from individuals with a strong background in pharmacology and behavioral neuropharmacology. Send curriculum vitae to: Dr. J. L. Young, Department of Neurobiology, Indiana University, Bloomington, IN 47405.

POSTDOCTORAL POSITION available to study gene regulation during differentiation of the human male germ line in support of research on spermatogenesis and the role of transposons in gene expression. The New York University Medical Center Department of Medical and Molecular Pathology is committed to maintaining a culture facility for Planned Family Life. Other faculty members are involved in research on gene regulation and translation in mammalian systems. Send curriculum vitae and names and addresses of three references to: Dr. J. L. Young, Department of Neurobiology, Indiana University, Bloomington, IN 47405.

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FROM INDIVIDUAL STRENGTHS COME COLLECTIVE SUCCESS.

The wondrous bromeliad. In a rain forest, this elegant epiphyte provides food for insects and small animals nourished by microorganisms 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.

Today, this same philosophy is bringing five Johnson & Johnson companies together to form a dynamic new research management group—the R.W. Johnson Pharmaceutical Research Institute (PRI).

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 Pharmaceuticals Corporation R&D, Cilag International Research Center, McNeil Pharmaceuticals 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.

An Equal Opportunity Employer m/f.

R.W. JOHNSON
PHARMACEUTICAL
RESEARCH
INSTITUTE

La Jolla  Zurich  Spring House  Raritan  Toronto
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 viscoelasticometry. Required Ph.D. in physics/biophysics/radiobiology and 5 years of experience in radiobiology with 3 years in tissue culture and viscoelasticometry. 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 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.

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Epithelial Cell Investigation

Postdoctoral Fellowship

A Rewarding Future For You Starting January, 1990

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, electro-physiological 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, Dept. 2237, 444 Saw Mill River Road, Ardsley, New York 10502-2699. We Are An Equal Opportunity Employer M/F/H/V.

Science Serving Mankind

CIBA-GEIGY

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 postdoctoral research experience and also named and telephone numbers of three references by 15 December 1989 to: Dr. A. L. Kiernanbaum, Chairman, Department of Cell Biology and Anatomical Sciences, The City University of New York Medical School, Room 1916

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

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

RESEARCH LABORATORY ASSOCIATE

St. Vincent’s Hospital and Medical Center of New York, an 813-bed university hospital of the New York Medical College is conveniently located in Green-which Village. Our newly reorganized Department of Medicine, the hospital’s largest 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 comparisons and fill out an application. Contact Nancy Goldstein, Interviewer, St. Vincent’s Hospital and Medical Center of New York, 125 West 11th Street, New York, NY 10011. An Equal Opportunity Employer.
**Cetus**

**APPLICATIONS ARE INVITED FOR:**

**PHYSICIANS**

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.

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**Research Assistant — Plant Biotechnology**

Join American Cyanamid’s Agricultural Research Division where you’ll be part of a winning team committed to discovering new 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 ongoing 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:

**Amgen, Inc.**
Recruitment, Dept. #403
Amgen Center
Thousand Oaks
CA 91320-1789

An Equal Opportunity Employer

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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 modifications 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.

Cargill offers a competitive salary, pleasant work environment, and a strong benefits package. If you wish to be a member of a dedicated team of professionals, please send your resume to Donna Bloom.

**Cargill**
HRD #10, Box 9300
Minneapolis, MN 55440

An Equal Opportunity Employer
RESEARCH ASSOCIATE—CHEMISTRY

A postdoctoral research associate position is available to a qualified applicant for the synthesis of potentially useful therapeutic peptides. The candidate must have Ph.D. degree in natural products chemistry with a minimum of 6 months of postdoctoral training. Must possess ability to carry out research independently. Responsibilities include the area in the field of natural products and their synthetic analogs. Work will focus on the chemistry of cannabinoids and the synthesis and biological evaluation of other natural products. The candidate is expected to publish results in peer-reviewed journals. Salary will be commensurate with experience. Send curriculum vitae and names of three references to Dr. R. L. Ebert, Department of Veterinary Science, W. L. Henning Building, Box 115A, University Park, PA 16802. An equal opportunity/affirmative action employer.

SCIENCE WRITER

Wanted to assist in the writing of scientific papers (immunology, protein engineering, and computer modeling) to create novel proteins for the treatment of human disease, especially autoimmune disease and cancer. 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 at 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 contribute to a fast-paced program. Send curriculum vitae to: J. Oseck, Field Notes, 5921 Hilchenbach, West Germany.

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 engineering, 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 at 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 contribute to a fast-paced program. Send curriculum vitae to: J. Oseck, Field Notes, 5921 Hilchenbach, West Germany.

VETERINARY EPIDEMIOLOGIST—PENN STATE

The Department of Veterinary Science 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 education extension 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. L. Ebert, Department of Veterinary Science, W. L. Henning Building, Box 115A, University Park, PA 16802. An equal opportunity/affirmative action 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 conservation of coastal ecosystems. A possible topic might be the subatomic of the far east 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 consider applications: December 1989.

Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP


DOCTORAL PROGRAM IN MICROBIOLOGY

Sponsored by the American Society for Microbiology, the Graduate Program in Microbiology at Rutgers University invites applications for Fall 1990. Responsibilities include the supervision of graduate students in the area of microorganisms and their interactions with the environment. The program is designed to provide opportunities for graduate students to obtain a broad-based education in microbiology and to prepare them for careers in academia, industry, and government service. The program offers a wide range of opportunities for research in the areas of applied microbiology, environmental microbiology, and molecular biology. The program is approved by the New Jersey Board of Regents for the doctorate. Applicants must hold a Master’s degree in Microbiology or a closely related field. Interviews will be held in June at the Graduate School of Science on the Rutgers University campus in New Brunswick, NJ. Applicants should send a letter of interest indicating their research goals and a current curriculum vitae to: Program Director, Graduate Program in Microbiology, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903. Telephone: 201-932-9897; Fax: 201-932-6769. An equal opportunity/affirmative action employer.

MARINE BIOLOGICAL LABORATORY (MBL)

Opportunities are available for residents who have an interest in marine biology. Positions are available at any level of training from Ph.D. candidates to staff level scientists. For further information contact: MBL, P.O. Box 415, Woods Hole, MA 02543. Telephone: 508-548-6411. 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, transposons, or enzyme purification. Independence and creativity encouraged. Send curriculum vitae to: Dr. Michael McClcind, 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, paleontology, 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

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 mechanics, sleep, and aerosol deposition and clearance. Appropriate background includes 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, 605 Huntington Avenue, Boston, MA 02115. Telephone: 617-732-1911.

FELLOWSHIPS

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS available immediately in the areas of: (i) virology and immunology, endocrinology, pathophysiology; (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 an area of interest to: Dr. Herbert Weiner, CS-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 At, Barry Bavister, Neal First, Henry Luty, Paul Jennings, and Gerald Schatten. Research areas include: proteoglycans and differentiation of reproductive cells; sperm fertilizing ability and the regulation of embryos; genetic and environmental influences on 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

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. Rapport, 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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School of Graduate Studies, Box 415
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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 UMHF 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.

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Applications for the RENTAL OF RESEARCH LABORATORIES are invited from investigators who wish to take advantage of our special facilities, marine organisms and stimulating atmosphere. Applications are peer reviewed.

• Fellowship opportunities exist for young investigators. Summer laboratories, which are rented for a 4-month period, may be occupied from mid-April until mid-October. Arrangements can also be made for sabbatical leaves for year-round stays at the MBL. See below for MBL contact.

The MBL announces SUMMER RESEARCH SUPPORT OPPORTUNITIES FOR YOUNG INVESTIGATORS (postdoctoral, instructors, and assistant professors) for studies to be carried out at the MBL. Named fellowships offer support in particular disciplines.

• 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, Woods Hole, MA 02543; (508) 548-3705 ext. 441. MBL is an EEO Affirmative Action Institution
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