

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year, and is mailed on issue date. Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, 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 ADVERTISEMENTS

DEADLINE: Thursday, 10 a.m., 2 weeks prior to issue date. Advertising is accepted only in writing.

POLICIES: All classified ads will be edited and typeset according to **SCIENCE** style guidelines. NO ABBREVIATIONS. Any deadline for applications stated in ad must be at least 2 weeks after date of publication.

CLASSIFICATION: **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

RATE: \$41 per line, \$410 minimum, per week. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. To ESTIMATE ad cost, structure ad copy on a 52-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines \times \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

CREDIT CARDS: **SCIENCE** accepts MasterCard and VISA.

PREPAYMENT DISCOUNT: A 3% cash discount is granted to all prepaid line ads. Prepayment in U.S. dollars by checks drawn on U.S. banks is required for all foreign ads.

BOXES AND LOGOS: Any 1-column line classified ad can be boxed and/or published with logo. No extra production charge for use of box or logo. For boxed ads, one line equals 48 characters and spaces; two additional lines will be added to cost of ad to allow for top and bottom rules. Logos are billed according to number of lines needed to accommodate logo.

SITUATIONS WANTED ADS: As a service to AAAS members in good standing, **SCIENCE** offers free placement of Situations Wanted ads for individuals seeking full-time or part-time employment. A blind box may be used. Ads must be submitted in writing with text of 20 words or less, not including address or box number, and are limited to two insertions per member in each calendar year. Please enclose **SCIENCE** mailing label including AAAS membership number when submitting ad.

CANCELLATIONS: Deadline for cancellations is 10 a.m. Tuesday, 10 days prior to issue date.

Address ad copy or requests for information to:

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

DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (1/6 page and larger) and all Marketplace listings of available products and services, contact:

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

RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications. **SCIENCE** encourages applicants for positions to investigate employment laws, non-discrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to:

Box (give number)
SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005

POSITIONS OPEN

The Department of Molecular Biology at Princeton University invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level from investigators who use the mouse as an experimental system. Areas of specialization may include (but are not restricted to) immunology, genetics, neurobiology, developmental biology, chromosome structure, or genome analysis. Candidates should have a Ph.D. degree and appropriate experience in mouse molecular biology. Applicants should send curriculum vitae, a summary of research interests, and the names of at least three referees to:

Mouse Molecular Biology Search Committee
Department of Molecular Biology
Princeton University
Princeton, NJ 08544

Application deadline is 20 October 1990.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF LOUISVILLE DEPARTMENT OF BIOLOGY

Tenure-track position to be filled for the 1991-92 academic year at the **ASSISTANT PROFESSOR** level, Ph.D. required, specializing in vertebrate zoology or closely related field (other than ichthyology); postdoctoral experience preferred. Research must be compatible with environmental biology doctoral program, preference in fields complementary to present faculty (e.g., biodiversity, molecular systematics, behavior). Teaching responsibilities in specialty for graduate courses and in comparative vertebrate anatomy for undergraduate curriculum. Service includes curation of terrestrial vertebrate collections. Applications must be received by 1 October 1990. Submit curriculum vitae, list of publications, and names, addresses, and telephone numbers of five persons from whom letters of reference may be obtained. Send to: **Search Committee, Vertebrate Zoologist, Dr. William D. Pearson, Chair, Department of Biology, University of Louisville, Louisville, KY 40292.**

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

Minneapolis: The University of Minnesota Department of Psychiatry seeks psychiatrists to fill two 12-month faculty positions as **ASSISTANT PROFESSOR** with a probationary appointment towards tenure. The position entails commitment to research and teaching. The successful applicant will share with other faculty members responsibility for one of several teams which treat hospitalized and nonhospitalized general psychiatric patients. Each team, in addition to treating patients, has the responsibility of training residents, medical students, and psychology interns. The teams may develop specialized treatment and research programs for particular psychiatric disorders. Applicants should be Board-eligible, with demonstrated interest and ability to do psychiatric research. Send résumés to: **Richard Pyle, M.D., UMHC Box 393, University of Minnesota Hospitals, Minneapolis, MN 55455** by 31 January 1991.

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

ASSISTANT PROFESSOR (NEUROSURGERY)

Position available: assistant professor of surgery (neurosurgery) for director of clinical research. Applicants should have Ph.D. and advanced practice nursing as a nurse practitioner and/or a clinical nurse specialist. A faculty position for a director of clinical research at the assistant professor level in the Division of Neurological Surgery of the Department of Surgery at the University of Utah School of Medicine is available. The position requires a Ph.D. in a nursing discipline. The appointee should have a strong background in neuroscience critical care nursing, with expertise in nutrition management of neurologically impaired patients, and experience in design and management of research protocols. The position requires advanced practice nursing abilities as a nurse practitioner and/or a clinical nurse specialist. Deadline for receipt of applications is 15 October 1990. Applications postmarked or submitted after the closing date may be considered if no qualified candidates have applied by that time. Contact: **M. Peter Heilbrun, M.D., Professor and Head, Division of Neurosurgery, University of Utah Medical Center, 50 North Medical Drive, Salt Lake City, UT 84132.** *The University of Utah is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

Yale University: The Department of Chemistry invites applications for an anticipated position at the **ASSISTANT PROFESSOR** level in the area of organic chemistry, effective the academic year 1991. We seek talented teacher-scholars who show promise for developing outstanding research programs.

Applicants should send curriculum vitae, a statement of research interests and plans, and should arrange for the submission of three letters of recommendation. All materials should be received by 31 October 1990. Send applications to: **Professor Frederick E. Ziegler, Chairman, Department of Chemistry, 225 Prospect Street, Box 6666, Yale University, New Haven, CT 06511-8118.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSORS. The Department of Anatomy is seeking applications for tenure-track assistant professor positions with teaching in histology/neuroscience or gross anatomy. Strong research programs are essential. Research areas are open, although preference will be given to candidates in neurobiology or cellular/molecular biology. Ph.D., M.D./Ph.D., or equivalent degrees; at least 2 years of postdoctoral research; and funded or fundable research programs are required. Submit curriculum vitae and arrange for three letters of recommendation to be sent by 15 October 1990 to: **Dr. Joseph T. Weber, Department of Anatomy, Tulane Medical School, 1430 Tulane Avenue, New Orleans, LA 70112.** *Tulane is an Equal Opportunity/Affirmative Action Employer. Applications from qualified women and minorities are encouraged.*

ASSISTANT PROFESSOR, NUTRITIONAL SCIENCES. Tenure-track, 9-month, teaching/research position. Qualifications include a Ph.D. in nutrition or related area, teaching experience, and research publications. Responsibilities include teach two nutritional science courses, advise students, develop a fundable research program, and university service. Applications accepted until 30 September 1990, or until position is filled. *Women and minority candidates are encouraged to apply.* *The University of Vermont is an Affirmative Action/Equal Opportunity Employer.* Send letter of application including narrative statements of teaching experience and research plans, names and address of three referees, curriculum vitae listing all publications, and other materials considered appropriate to: **Dr. Robert S. Tyzbit, Department of Nutritional Sciences, University of Vermont, Burlington, VT 05405.**

ASSISTANT PROFESSOR MOLECULAR IMMUNOLOGY

The Department of Microbiology and Immunology, Baylor College of Medicine, invites applications for a tenure-track faculty position in molecular immunology. We seek an individual of exceptional capabilities with a strong postdoctoral training record and substantial research productivity in molecular biology and/or molecular immunology. The candidate should be determined to establish a strong independent research program and should welcome collaborative interactions with department colleagues in T lymphocyte immunoregulation, MMC structure, function, and genetics. Interested applicants should send curriculum vitae, a brief description of research plans, and names of three references to: **Dr. Robert R. Rich, Department of Microbiology and Immunology, M929, Baylor College of Medicine, Houston, TX 77030.** Applications received before 31 October 1990 will receive preference in review. *Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OR INSTRUCTOR.

Two positions available: **ECOLOGIST**, full- or part-time position (January to September 1991) to teach one or two ecological and/or field oriented courses, environmental science for nonmajors, and to team-teach an introductory level physiological ecology course; **MICROBIOLOGIST**, 6-month appointment (March to September 1991) to teach genetics, microbiology, and to team-teach cell biology. Ph.D. and teaching experience preferred for both positions. Send curriculum vitae, transcripts, and three letters of recommendation to: **Dr. Carolyn R. Newton, Department of Biology, Kalamazoo College, Kalamazoo, MI 49007.** Review of applications will begin 1 October 1990 and continue until the positions are filled. *Affirmative Action/Equal Opportunity Employer. Kalamazoo College is committed to diversity and particularly encourages women and minorities to apply.*

POSITIONS OPEN

ASSISTANT PROFESSOR (PHYSIOLOGY).

Utilize a variety of invasive and noninvasive biophysical and biochemical techniques to study isolated and intact cerebral blood vessels to explore the mechanisms whereby substances of abuse can cause brain injury, in order to design new therapeutic modalities to prevent, diagnose, and treat these brain disorders. Two years of postdoctoral training in cardiovascular pathophysiology with special emphasis in biophysics and biochemistry of cerebral vascular smooth muscle. Familiarity with atomic absorption spectroscopy, reflectance spectroscopy, high-pressure liquid chromatography, computer programming, and image analysis required. Doctorate in pathophysiology, 2 years of experience; \$25,000 to \$30,000 per year. *Immigration Service authorization for employment. Affirmative Action Employer.* Send résumé in duplicate to: **Dr. Burton M. Altura, Department of Physiology, Box 31, State University of New York (SUNY) Health Science Center at Brooklyn, 450 Clarkson Avenue, Brooklyn, NY 11203-2098. DMC#C0345.**

ASSISTANT PROFESSOR, NEUROPHARMACOLOGY/NEUROTOXICOLOGY.

The Department of Pharmacology, Toxicology, and Therapeutics at the University of Kansas Medical Center invites applications for a tenure-track position for a neuropharmacologist, neurochemist, or neurotoxicologist. The applicant must have an appropriate Ph.D. or M.D. degree, with two or more years of relevant postdoctoral experience. The successful candidate will be expected to establish an independent research program and contribute to graduate and medical teaching. Research interest is open but targeted areas include drug abuse, developmental and behavioral pharmacology/toxicology, and mechanisms of brain damage. Primary appointment will be in this department but will include an affiliation with the Mental Retardation Research Center. A further affiliation with the Center for Environmental and Occupational Health is possible. Applications, including curriculum vitae, a short summary of research plans, and the names of three references, should be received by 1 November 1990, but the search will remain open until the position is filled. Send applications to: **Dr. Richard H. Alper, Department of Pharmacology, Toxicology, and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66103. The University of Kansas is an Affirmative Action/Equal Opportunity Employer.**

GENETICS, CELL AND MOLECULAR BIOLOGY, AND DEVELOPMENT DEPARTMENT OF BIOCHEMISTRY BAYLOR COLLEGE OF MEDICINE

The Department of Biochemistry has two tenure-track faculty positions in the areas of genetics, cell and molecular biology, and development. These positions provide newly renovated laboratory space, institutional start-up funding, limited teaching requirements, and an excellent opportunity to build a research program within a large and interactive research community. Applicants at the ASSISTANT PROFESSOR level are preferred, but more senior candidates will be considered. Interested individuals should send their curriculum vitae, a statement of present and future research interests, and the names of three references to:

**Dr. John Wilson, Search Committee
Department of Biochemistry
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030**

An Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR; DIRECTOR, HUMAN VESTIBULAR LABORATORY.

The Department of Surgery at the University of Chicago invites applications for a tenure-track position (assistant or associate professor), which involves directing a human/clinical vestibular testing laboratory. Applicants should hold an M.D. or a Ph.D. degree and have an established track record in basic and clinical research, including demonstrated ability to secure extramural funding. Please send curriculum vitae, a summary of research and clinical interests, and a list of three references by 1 October 1990 to: **Vijay Dayal, M.D., Department of Surgery, Section of Otolaryngology/Head and Neck Surgery, 5841 South Maryland Avenue, Box 412, Chicago, IL 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

BEHAVIORAL PHYSIOLOGIST NEUROETHOLOGIST

The Department of Biological Sciences, University of Cincinnati, has a tenure-track position in behavioral physiology available at the ASSISTANT PROFESSOR level starting 1 September 1991. We seek an individual whose primary research interests are in animal behavior and its underlying physiological mechanisms (e.g., neural, endocrine, sensory). Preference will be given to candidates whose research integrates cellular and/or physiological approaches with behavioral observation and analysis, and who can interact with departmental colleagues in behavioral ecology and physiology.

The university is a comprehensive state university with an enrollment of 36,000 students. The department has 30 faculty in diverse areas and approximately 70 graduate students, and is currently expanding in the areas of environmental/evolutionary biology and cellular/molecular biology.

The position requires a Ph.D. degree, and postdoctoral experience is preferred. The successful candidate will be expected to develop a vigorous, externally funded research program, train graduate students, and teach graduate and undergraduate courses in animal behavior and/or their specialty. Applicants should submit, by 15 November 1990, curriculum vitae, a description of research and teaching interests, and at least three letters of reference to: **Dr. George W. Uetz, Behavioral Physiologist Search Committee, Department of Biological Sciences, University of Cincinnati, Cincinnati, OH 45221-0006. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.**

PLANT GENE EXPRESSION UNIVERSITY OF NEBRASKA-LINCOLN

Seeking applications for tenure-track ASSISTANT OR ASSOCIATE PROFESSOR position with Department of Biochemistry in conjunction with University of Nebraska's Center for Biotechnology. Particularly interested in candidates conducting research in plant gene expression (e.g., identification and characterization of genes and gene products that regulate gene expression, developmental aspects of gene regulation, regulation of genes involved in photosynthesis and/or cellular growth and metabolism). Other areas of plant molecular biology may also be considered. Successful applicant will be expected to develop a strong research program and participate in teaching at the undergraduate and/or graduate levels beginning 2 years after initial appointment. Position is joint appointment between Center for Biotechnology and Institute of Agriculture and Natural Resources, offering a generous start-up package. Requires Ph.D. and postdoctoral experience. Send curriculum vitae, one-page statement of research interests, representative reprints/preprints, and three letters of reference postmarked by 1 October 1990 (or until a suitable candidate is found thereafter) to: **Dr. Robert J. Spreitzer, Department of Biochemistry, University of Nebraska-Lincoln, Lincoln, NE 68583-0718. Affirmative Action/Equal Opportunity Employer.**

EUKARYOTIC MOLECULAR BIOLOGIST ASSISTANT/ASSOCIATE PROFESSOR

The Department of Molecular and Cellular Biochemistry of the Stritch School of Medicine at Loyola University of Chicago is seeking to fill a faculty position at the assistant/associate professor level in the area of eukaryotic molecular biology. Preference will be given to applicants interested in gene regulation, particularly the study of oncogenes. However, excellent applicants in other areas of eukaryotic molecular biology are invited. The successful applicant will be expected to initiate a vigorous, innovative, and extramurally funded research program, participate in medical school and graduate school teaching, and interact collaboratively with other scientists within the university. Generous start-up funds are available.

Send curriculum vitae, research interests and goals, recent reprints, and the names of three references to:

**Richard M. Schultz, Ph.D., Chairman
Department of Molecular and Cellular Biochemistry
Loyola University of Chicago
Stritch School of Medicine
2160 South First Avenue
Maywood, IL 60153**

Loyola University of Chicago is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE DEPARTMENT OF ANATOMY AND PENNSYLVANIA MUSCLE INSTITUTE

A tenure-track assistant professor position is being jointly offered by the Pennsylvania Muscle Institute and the Department of Anatomy of the University of Pennsylvania School of Medicine. The successful candidate will be expected to establish an extramurally funded research program using a molecular biological approach to study either gene regulation in muscle (preferred emphasis on development) or contractile protein structure/function relationships. The position will also involve the teaching of medical students (e.g., cell and tissue biology) and participation in the training of graduate students and postdoctoral fellows.

Application deadline is 31 October 1990. Send curriculum vitae and three letters of recommendation to: **Search Committee, c/o Dr. Yale Goldman, Director, Pennsylvania Muscle Institute, University of Pennsylvania School of Medicine, 37th and Hamilton Walk, Philadelphia, PA 19104-6085.**

The University of Pennsylvania is an Equal Opportunity Employer.

URBAN/PUBLIC HEALTH ENTOMOLOGIST

The Department of Entomology, University of Maryland, invites applications for a tenure-track appointment as an ASSISTANT PROFESSOR. Applicant must develop and implement innovative management programs for pests of structures and public health, conduct research in support of these programs, and teach an annual course in urban pest management. Training in the principles and application of IPM is essential and experience with pests of structures and public health is desirable. Send curriculum vitae, transcripts, statement of interests, and names and addresses of five references to: **Dr. Michael J. Raupp, Department of Entomology, University of Maryland, College Park, MD 20742 by 30 September 1990. Telephone: 301-454-7025. Equal Opportunity/Affirmative Action Employer.**

The Department of Molecular Biology at Princeton University invites applications for a tenure-track position at the ASSISTANT PROFESSOR level in the area of developmental neurobiology. We are especially interested in individuals who are working on the development or functioning of the nervous system in organisms which are amenable to both genetic and molecular analysis. Applicants should send curriculum vitae, a summary of research interests, and the names of at least three referees to:

**Developmental Genetics and Neurobiology
Search Committee
Department of Molecular Biology
Princeton University
Princeton, NJ 08544**

Application deadline is 20 October 1990.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMISTRY POSITIONS

The Department of Biochemistry at Kansas State University, a land-grant university, seeks applicants for two tenure-track positions, each with an appointment in the Agricultural Experiment Station and the College of Arts and Sciences. Candidates for the ASSISTANT to the JUNIOR ASSOCIATE PROFESSOR levels will be considered with interests in diverse areas of contemporary animal and plant biochemistry suitable to the mission of the Agricultural Experiment Station. We especially encourage individuals with research backgrounds in membrane biochemistry, protein engineering, protein processing, or signal transduction mechanisms to apply. All candidates should have postdoctoral experience and substantial published work; be prepared to establish an independent, externally funded research program; and be capable of teaching biochemistry to undergraduate and graduate students. Candidates seeking the rank of associate professor must have actively funded research programs. Applicants should send a résumé including a statement of research plans and the names of three references by 20 October 1990 to: **Thomas E. Roche, Head, Department of Biochemistry, Willard Hall, Kansas State University, Manhattan, KS 66506-3702. An Equal Opportunity/Affirmative Action Employer.**

CELL BIOLOGIST

Merck Sharp & Dohme Research Laboratories is offering an excellent career opportunity in the Department of Virus and Cell Biology for an endothelial cell biologist at the research facilities in West Point, PA, located 25 miles northwest of Philadelphia, PA.

The successful candidate for this position will play a leading role in a multi-disciplinary project involving the regulation of coagulation by the endothelium.

The position requires a Ph.D. or M.D. degree and three (3) years experience in manipulation of primary cultures of endothelial cells.

Excellent salary and benefit programs accompany this position.

Please send curriculum vitae with cover letter to: **Personnel Manager, Ad #B-28, Research Personnel, WP42-2, Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.**

EEO/AA/VH/Employer



Merck & Co., Inc.

Developmental Biologist

Applications are invited for a Senior or Junior tenure-track faculty position.

Applicants should have at least four years of postdoctoral experience and maintain a research program in early development or tumorigenesis, using genetic, recombinant DNA, biochemical, immunological, and cell biological tools to explore mechanisms of cell differentiation, growth control, cell to cell communication and determination in a vertebrate system. The position includes supervision of graduate and medical students and teaching in a related area.

Send curriculum vitae, research summary and three letters of reference to: **Chairman, Department of Cell Biology and Anatomy, CORNELL UNIVERSITY MEDICAL COLLEGE, 1300 York Avenue, New York, New York 10021.** An Equal Opportunity/Affirmative Action Employer.

CORNELL UNIVERSITY MEDICAL COLLEGE



POSITIONS OPEN

ANATOMY POSITION

ASSISTANT/ASSOCIATE PROFESSOR of Anatomy. Twelve-month, tenure-track position. Experience in teaching medical gross anatomy and an earned doctorate in anatomy with postdoctoral experience required. The individual is expected to develop and sustain a fundable independent research program. Ultrastructural and research facilities are available. Applicants should send statement of interest, curriculum vitae, and three letters of recommendation to: **Dr. William J. Anderson, Chairman, Search and Screen Committee, Terre Haute Center for Medical Education, Indiana University School of Medicine, 135 Holmstedt Hall, Terre Haute, IN 47809.** *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

BOTANIST: ASSISTANT/ASSOCIATE PROFESSOR. Ph.D. required, postdoctoral experience preferred. The Biology Department, California State University, Los Angeles, will fill a tenure-track faculty position beginning fall 1991 for a person with research interests in an area of environmental biology involving vascular plants; such as (but not limited to) autecology or vegetation studies, environmental restoration, or pollution biology. The person will teach introductory botany courses for majors and for nonmajors, and will have the opportunity to develop a course in their specialty field. An active research program involving undergraduate and graduate students is expected. Submit curriculum vitae, statement of research plans, college transcripts, and three letters of reference by 15 November 1990, to: **Dr. Richard Vogl, Biology Search Committee, California State University, Los Angeles, Los Angeles, CA 90032-8201.** *Equal Opportunity/Affirmative Action/Handicapped Employer.*

NUTRITIONIST/BIOCHEMIST

Horn Point Environmental Laboratory (HPEL) and the Agriculture Experiment Station of the University of Maryland System are seeking applications for a joint tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position in the research area of nutrition/biochemistry of aquatic invertebrates and fishes. Specialties of interest include feeding and assimilation, with emphasis on the nutritional role of natural and artificially prepared aquaculture diets. A Ph.D. in biochemistry or nutrition is required and postdoctoral experience is preferred. The successful candidate is expected to develop a strong and independent research program as well as participate in graduate education. Applicants should forward a statement of research interests, curriculum vitae, and names and addresses of three references by 1 November 1990 to: **Dr. R. Harrell, HPEL, Box 775, Cambridge, MD 21613.** Telephone: 301-228-8200. FAX: 301-476-5490. *The University of Maryland is an Affirmative Action/Equal Opportunity Employer.*

SENIOR FACULTY POSITION IN RETROVIROLOGY AND DIRECTOR, CENTER FOR RETROVIRUS RESEARCH THE OHIO STATE UNIVERSITY

The Department of Veterinary Pathobiology invites applications for a tenure-track position as a senior faculty person and director of the newly created Center for Retrovirus Research. The applicant should have a Ph.D. degree or equivalent with extensive research experience in retrovirology or related fields, proven ability to obtain extramural research funds, and a strong commitment to graduate education. Maintenance of an independent, established research program with extramural support and development of collaborative research efforts with faculty and graduate students on animal and/or human health-related retroviral disease problems are essential. Applications must include curriculum vitae, statement of career goals, summary of current research activities, and names of at least four individuals from whom letters of reference may be solicited. Academic rank and salary are negotiable. Deadline for applications is 1 December 1990. Address correspondence to: **Dr. Steven Krakowka, Chairman of Search Committee, Department of Veterinary Pathobiology, 1925 Coffey Road, Columbus, OH 43210.** *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

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

POSITIONS OPEN

ASSISTANT PROFESSOR. Tenure track, Department of Microbiology/Immunology. Successful candidate will devote 75% of time to development of an independent fundable research program in any subdiscipline of microbiology, parasitology, or immunology, and also participate in teaching program of the department. Ph.D. required. Submit letter of application, curriculum vitae with research interests, and names of at least three references to: **Gerald J. Tritz, Ph.D., Chairman, Department of Microbiology/Immunology, Kirksville College of Osteopathic Medicine, 800 West Jefferson Street, Kirksville, MO 63501.** *Equal Opportunity/Affirmative Action Employer.*

DEVELOPMENTAL NEUROSCIENTIST

The Department of Physiology and Cell Biology invites applications for a tenure-track faculty position at the rank of **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** to start 16 August 1991. Applicant must have a Ph.D. in neuroscience or a related field, postdoctoral experience, and research experience in developmental and molecular aspects of neuroscience. The successful candidate will be expected to maintain a strong independent research program and participate in the teaching of undergraduate and graduate students. The salary will be commensurate with qualifications. Applications will be reviewed starting 1 December 1990 and thereafter until the position is filled. Applicants should send curriculum vitae, an outline of current and future research plan, and the names of three references to: **Dr. Jang-Yen Wu, Professor and Chair, Department of Physiology and Cell Biology, 3038 Haworth Hall, University of Kansas, Lawrence, KS 66045.** *An Equal Opportunity/Affirmative Action Employer.*

The Department of Molecular Biology at Princeton University invites nominations and applications for an **ENDOWED PROFESSORSHIP**. Candidates should head an active research program and have an established reputation for excellence in scholarly research. Preference will be given to candidates with a strong background and research interest in biochemistry. For further information, contact:

**Professor Thomas Shenk
Lewis Thomas Laboratory
Department of Molecular Biology
Princeton University
Princeton, NJ 08544**

Princeton University is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON, DEPARTMENT OF CHEMISTRY, Indiana University-Purdue University at Indianapolis (IUPUI). Nominations and applications are invited for this position in an expanding and developing department. Candidates must have a research, funding, and teaching record to merit appointment at the rank of professor, possess strong communication and interpersonal skills, and, preferably, have prior administrative experience. Preference will be given to the areas of organic chemistry, biochemistry, and analytical chemistry, although all areas will be considered. Appointment will commence July 1991. Applicants should send curriculum vitae and names, addresses, and telephone numbers of four references by 1 November 1990 to: **Dr. Martin J. O'Donnell, Department of Chemistry-IUPUI, 1125 East 38th Street, Indianapolis, IN 46205.** *IUPUI is an Equal Opportunity/Affirmative Action Employer.*

CRYSTALLOGRAPHIC LABORATORY DIRECTOR

An immediate full-time position is available. Responsibilities include: (i) supervision of Rigaku 200 x-ray generator, Siemens area detector, and low-temperature device; (ii) system management of VAX station 3200 running under VMS; and (iii) software support for crystallographic program packages such as XENGEN, CCP4, and X-PLOR. Opportunities to expand into graphics workstation and UNIX network management. Familiarity and experience with x-ray generators and crystallographic software is required and experience in macromolecular crystallography is desirable. *Women and minorities are encouraged to apply.* Please send curriculum vitae and names of three references to: **Dr. Craig Kundrot, Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO 80309.** BITNET: KUNDROT@CECHEM.COLORADO.EDU.

POSITIONS OPEN

DIRECTOR, DIVISION OF EXPERIMENTAL PATHOLOGY. The Department of Pathology and Laboratory Medicine of the University of Rochester announces a search for an experimental pathologist to be appointed director of the Division of Cell and Molecular Pathology and George Hoyt Whipple Professor of Pathology and Laboratory Medicine. The research focus of this newly organized division is the elucidation of the cellular and molecular basis of human diseases. The appointee will provide leadership to enhance and expand the scientific endeavors of the department through recruitment of additional faculty and graduate and postgraduate trainees. Applications from individuals with M.D., M.D./Ph.D., or Ph.D. degree are welcome.

Interested candidates should submit by 30 October 1990 their curriculum vitae and other credentials to: Search Committee for Division of Cell and Molecular Pathology, c/o Dean A. Arvan, M.D., Department of Pathology and Laboratory Medicine, University of Rochester Medical Center, 601 Elmwood Avenue, Box 608, Rochester, NY 14642. Telephone: 716-275-5891. The University of Rochester is an Equal Opportunity Employer, M/F.

PROGRAM DIRECTOR MARINE-ESTUARINE-ENVIRONMENTAL SCIENCES (MEES) UNIVERSITY OF MARYLAND SYSTEM

The University of Maryland seeks a director for its system-wide Graduate Program in Marine-Estuarine-Environmental Sciences. Students in this program may pursue M.S. and Ph.D. degrees at several campuses of the University of Maryland System, including at the Center for Environmental and Estuarine Studies (CEES) and the Maryland Biotechnology Institute. More than 200 students are enrolled at present.

The successful candidate should have a strong research program and teaching experience in some area of environmental science. She or he will have tenure within an appropriate department of the College of Agriculture and Life Sciences at the University of Maryland, College Park, and also carry the title of Associate Director for Educational Affairs in CEES. The MEES program director will be responsible for curriculum development, student admission, and coordination of participating faculty on a system-wide basis. She or he will develop a comprehensive program budget and seek both intra- and extramural support.

Applicants should submit a letter of interest, complete curriculum vitae, and the names of three references by 1 November 1990 to: Chair, MEES Director Search Committee, Room 3220 Symons Hall, University of Maryland, College Park, MD 20742-5571.

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



WWF World Wide Fund
For Nature

RESEARCH ADVISER, CHINA

WWF is the world's largest private international conservation organization with 27 affiliate and associate national organizations on five continents. WWF aims to conserve the natural environment and ecological processes essential to life on earth.

WWF is seeking to recruit a research adviser to develop a comprehensive research program for Wolong Nature Reserve, Sichuan Province, China. The program will cover both field research on the biology of the giant panda and its habitat, and laboratory research and captive breeding. It will be implemented by Chinese scientists with the assistance and guidance of the research adviser.

The position will be based on Wolong Nature Reserve which is administered by the Ministry of Forestry of The People's Republic of China. The activities of the adviser will be part of an ongoing cooperative program between the ministry and WWF.

The position will require a Ph.D. in the biological sciences and extensive experience in developing and supervising research programs. Experience in China is an advantage.

Applications, including a recent curriculum vitae and photograph, should be submitted by 14 September 1990 to: Mr. Chris Elliott, WWF International, Avenue du Mont Blanc, CH-1196 Gland, Switzerland.

31 AUGUST 1990

Join Wyeth-Ayerst Laboratories, one of the world's largest pharmaceutical research and development groups. Now is your opportunity to become an integral member of our fast-paced, innovative team at our modern research facility in Princeton, New Jersey.

Preference will be given to those applicants with a strong publication record in major scientific journals, history of scientific achievement and a demonstrated ability to conduct innovative research.

RESEARCH SCIENTISTS Ph.D.

Pulmonary Pharmacologist/Physiologist

Investigate the involvement of pulmonary inflammation in late phase asthmatic responses and airway hyperreactivity and establish appropriate in vivo models for the evaluation of the pharmacologic activity of drug candidates. A PhD in Pharmacology, Physiology, or a related medical science with 0-3 years post-doctoral training is required. Experience in the measurement of pulmonary function in both small and large animal models will be considered an asset.

Cellular Electrophysiologist

Join an active research program in the study of ion channels and their modulation by drugs. Ideal candidate will be a PhD in Physiology, Pharmacology or Biophysics with 3-5 years relevant post-doctoral experience. Must have expertise in the use of patch clamp techniques applied to the study of K⁺ channel activity at both whole cell and single channel levels. Familiarity with the use of oocyte and mammalian cell expression systems is also desirable.

Cellular Electrophysiologist Postdoctoral Fellow

Study the regulation and pharmacological modulation of potassium channels in airway smooth muscle using whole-cell and single channel voltage clamp techniques and work with collaborating academic investigators expert in the field of airway smooth muscle electrophysiology. Ideal candidate will have a recent Ph.D. in Physiology, Pharmacology or Biophysics, and working knowledge of smooth muscle physiology. Familiarity with measurements of internal calcium levels using fluorescent indicator dyes is useful.

Drug Metabolism

Develop analytical methods for the analysis of drugs in biological fluids using techniques such as HPLC, GLC, etc. The methods will be applied in preclinical and clinical bioavailability and pharmacokinetic studies. Ideal candidate will have 3-6 years experience in the bioanalytical area and experience in the area of quantitative analysis of drugs in biological fluids. Expertise in pharmacokinetics and statistics is an asset.

Biochemistry - Postdoctoral Fellow

Study the role of nucleotide phosphodiesterases as regulators of cellular reactivity, and as potential pharmacologic targets. Will be responsible for establishing novel methodologies to purify and characterize individual phosphodiesterase isozymes from various cell sources, and to investigate their physiological roles. A Ph.D. in Biochemistry or a related field is required, with experience in enzyme purification and kinetic enzyme analysis. Experience in cellular mechanisms of enzyme regulation and protein purification via HPLC are desirable.

We offer an excellent salary and benefits package plus opportunities for career advancement. Interested candidates should submit their curriculum vitae and salary requirements, stating position of interest, to: **WYETH-AYERST RESEARCH, Personnel Manager, CN 8000, Princeton, NJ 08643-8000.** An equal opportunity employer, M/F/H/V.



Biological Chemistry

Continued expansion of biomolecularly targeted drug discovery efforts at PARKE-DAVIS, a Warner-Lambert Company, has provided openings for Ph.D.-level scientists in our new Department of Biological Chemistry. Help us to establish the department and its research directions.

Positions in enzymology, bio-organic and protein chemistry will be central to the establishment of a major venture in biological chemistry at PARKE-DAVIS. You will design and implement new enzyme kinetic assays for novel compounds, and determine structure-function relationships, for example, via studies utilizing site-directed mutagenesis. Or you will participate in the isolation, purification, and characterization of natural and recombinant proteins. Receptors, catalytic or non-catalytic antibodies, and anti-idiotypic antibodies as well as enzymes, may ultimately fall within the scope of your work.

Qualified candidates will, for example, have at least two years' research experience in performing quantitative studies of enzyme-catalyzed reactions, computer-assisted kinetic analyses and equilibrium-binding studies of protein-ligand interactions. Familiarity with standard biochemical techniques and modern methods of protein chromatography and electrophoresis is essential. An understanding of the principles of molecular biology and biophysics is also expected.

Close, interdisciplinary working relationships will be established with PARKE-DAVIS, scientists in computer-assisted drug design, structural biology and chemistry, and molecular genetics. You will also work with our outstanding in-house group of medicinal chemists, biochemists, and pharmacologists, among others, as well as with well-known outside collaborators in many disciplines. With the University of Michigan "next door", candidates will become part of a distinguished research environment.

Good oral and written communication skills are important. And because of the need to work with as well as to be a part of multidisciplinary groups, this position requires an ability to interact effectively with a variety of scientists operating at the leading edge of drug discovery.

This is an exciting time for the pharmaceutical industry. The convergence of state-of-the-art technologies allows us to begin to answer questions previously unanswerable. Join us and contribute to accelerating progress in drug discovery and the medical sciences.

Interested individuals should send their CV to **Jack Moyer, PARKE-DAVIS, Pharmaceutical Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"

"Equal Opportunity In Action"



PARKE-DAVIS

A DIVISION OF **WARNER LAMBERT**

PHARMACOLOGIST TOXICOLOGIST

Neurobiology & Molecular Biology

Regeneron Pharmaceuticals, a company dedicated to developing therapeutic agents for degenerative and traumatic neurological diseases, is seeking to apply recent advances in the understanding of neuronal growth and regeneration.

Regeneron is seeking a pharmacologist/toxicologist to oversee preclinical safety and efficiency testing of our novel recombinant neurotrophic molecules. Industry experience and background in neuropharmacology are essential requirements for this position.

Regeneron's modern facility is located on a 275-acre wooded campus in Westchester County, 20 miles north of Manhattan, near major universities and medical centers. We offer an excellent compensation package, including generous stock options. Suburban Westchester features attractive and affordable housing, outstanding public schools and recreational facilities along with ready access to the cultural and business centers of New York City.

Please forward your resume, in confidence to: Ms. Carol Deaken, Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, NY 10591-6706. Equal opportunity employer.

REGENERON

Pharmaceuticals, Inc.

Career Opportunities

Lawrence Livermore National Laboratory, one of the nation's premier research and development organizations, currently has the following challenging opportunities available:

Technical Information Specialist \$2,898 - \$5,552

The successful applicant will be responsible for literature searching and analysis, answering reference questions, indexing technical reports, and designing/developing special collections or custom databases.

Requirements include a MLS from an ALA-accredited university with a minimum of 4 years reference experience in a sci/tech library; or a BS/MS/PhD in Physics, Computer Science, Engineering or Mathematics with a minimum of 2 years related work experience. Special consideration will be given to candidates with both an MLS and a BS/MS/PhD in one of the above mentioned areas.

Sr. Systems Analyst \$3,048 - \$4,418

The successful applicant will be responsible for analysis, design, programming, testing, implementation, documentation, and client training and support. The technical environment will include BASIS DBMS software, TECHLIB library interface, and C. The hardware consists of DEC VAX systems running VMS.

Requirements include a BS/MS or equivalent in Computer Science, or a corresponding degree in Business or Library/Information Science with an emphasis in computer systems. Specific programming skills in BASIS or other relational DBMS software, C, and VMS is highly desirable.

LLNL offers an excellent compensation and benefits package. For immediate consideration, forward your resume to: **Jack Willis, Professional Staffing, Lawrence Livermore National Laboratory, P.O. Box 5510, L-725, Dept. A90340, Livermore, CA 94550.** Equal Opportunity Employer.

University of California

 **Lawrence Livermore National Laboratory**



THE UNIVERSITY OF ADELAIDE SOUTH AUSTRALIA

Applications are invited from both women and men for the following positions:

LECTURER/SENIOR LECTURER IN ANIMAL SCIENCES (Tenurable) (Two positions)

in the DEPARTMENT OF ANIMAL SCIENCES at the WAITE AGRICULTURAL RESEARCH INSTITUTE.

Ref. 7453 is in the area of ANIMAL BIOCHEMISTRY. Applicants should have a solid background in biochemistry and knowledge of nutritional and metabolic biochemistry, preferably with research interests in protein biochemistry and the control of growth and development through genetic and protein engineering. The appointee will be required to teach an undergraduate course in nutritional biochemistry of farm animals, to supervise undergraduate and post-graduate research students, to initiate a research programme on the cellular and molecular biology of animal growth and development and to interact with research groups in animal productions, wool biology, reproduction and animal biotechnology.

Ref. 7454 is in the area of MOLECULAR BIOLOGY for the study of reproduction in animals. Applicants should have experience in molecular and cellular biology of animals preferably with research interest in the area of animal transgenesis and gene expression during development. The appointee will be required to teach in undergraduate and post-graduate courses in Animal Cell and Molecular Biotechnology, and Reproductive Biology & Technology, to supervise undergraduate and post-graduate research students, to initiate a research programme in the area of animal transgenesis and the cellular and molecular biology of animal reproduction and to interact with research groups in male reproduction and reproductive immunology.

The successful applicants would be expected to hold a Ph.D. degree or have equivalent professional training and experience in an appropriate discipline.

The positions are available immediately.

Further information concerning the duties of the position may be obtained from, Professor BP Setchell, Head of the Department of Animal Sciences, telephone (61 8) 372 2297.

LECTURER/SENIOR LECTURER IN CEREAL MOLECULAR BIOLOGY (Tenurable) (Two positions)

(Refs. 7451 & 7452) at the WAITE AGRICULTURAL RESEARCH INSTITUTE. The appointees will be required to undertake original research, supervise postgraduate students and teach undergraduate courses in the Departments of Agricultural Biochemistry and Agronomy. The Departments would be particularly interested to receive applications from molecular biologists with expertise in the following areas:

- (i) methods of mapping molecular probes particularly in the temperate cereals
- (ii) gene identification, isolation and cloning and
- (iii) the control of gene expression.

However, molecular biologists with demonstrated skills in other areas of relevance to cereal molecular biology and its application to cereal improvement will be considered.

The successful applicants would be expected to hold a Ph.D. degree or have equivalent professional training and experience in an appropriate discipline.

The positions are available immediately.

Further information concerning the duties of the positions may be obtained from, Professor DR Marshall, Head of the Department of Agronomy, telephone (61 8) 372 2279.

LECTURER IN SOIL PHYSICS

(Tenurable) (Ref: 7455)

SENIOR LECTURER IN SOIL BIOLOGY/MICROBIOLOGY

(Tenurable) (Ref: 7456)

in the DEPARTMENT OF SOIL SCIENCE at the WAITE AGRICULTURAL RESEARCH INSTITUTE.

(Ref. 7455) The appointee will participate in teaching in the Faculty of Agricultural and Natural Resource Sciences and the Faculty of Science and be the focus for the development of research in the physics of soil water and its interaction with structure.

Soil Science is taught in the ordinary and Honours degree in the B.Ag.Sc. and soil physics specifically in the subjects Soil Water and Soil Conservation and Management. The Department of Soil Science cooperates closely with the CSIRO Division of Soils and the South Australian Department of Agriculture in teaching and research.

Applicants must possess the degree of Ph.D. in soil physics, hydrology or a closely related area.

(Ref. 7456) The appointee will participate in teaching in the Faculty of Agricultural and Natural Resource Sciences and the Faculty of Science and be the focus for the development of research in soil biology, microbiology and biochemistry.

Soil Science is taught in the ordinary and Honours degree in the B.Ag.Sc. and electives in the B.Sc. including Soil Biology and Biochemistry. The Department of Soil Science cooperates closely with the CSIRO Division of Soils and the South Australian Department of Agriculture in teaching and research.

Applicants must possess the degree of Ph.D. in biology or microbiology.

The positions are available immediately.

Major interest in the department include aspects of soil structure, tillage, carbon and nitrogen cycling, plant nutrient supply and the movement of water and colloids in soils and landscapes. The Waite campus, which includes the CSIRO Divisions of Soils and Water Resources, and the South Australian Department of Agriculture, has available a wide range of sophisticated research equipment and experimental field sites.

Further information concerning the duties of the positions may be obtained from Professor JM Oades, Head of the Department of Soil Science, telephone (61 8) 372 2210.

It is University policy to encourage women to apply for consideration for appointment to tenurable academic appointments. Holders of full-time tenured or tenurable academic appointments have the opportunity to take leave without pay on a half-time basis for a specific period of up to ten years when this is necessary for the care of children.

INFORMATION about the general conditions of appointment and selection criteria may be obtained from the Director, Personnel Services at the University.

SALARY per annum: Lecturer: A\$33,163 x 7 - A\$43,096

Senior Lecturer: A\$43,984 x 5 - A\$51,015

APPLICATIONS, IN DUPLICATE, quoting relevant reference number and giving full personal particulars (including whether candidates hold Australian permanent residency status), details of academic qualifications and names and addresses of three referees should reach the Director, Personnel Services at the University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001, Telex UNIVAD AA 891 41, Facsimile (61 8) 224 0464 not later than 30 September 1990.

The University reserves the right to make enquiries of any person regarding any candidate's suitability for appointment, not to make an appointment or to appoint by invitation.

From 1 January 1991 Roseworthy Agricultural College will merge with the University of Adelaide.

THE UNIVERSITY OF ADELAIDE IS AN EQUAL OPPORTUNITY EMPLOYER.

961147

POSITIONS OPEN

CHAIRPERSON. Department of Neurology, School of Medicine, University of California, San Francisco (UCSF). Qualified candidates are invited to apply for the position as chairperson of the Department of Neurology at the UCSF School of Medicine. Applicants should submit curriculum vitae, bibliography, and the names of four references to: **Dorothy F. Bainton, M.D., Chair, Search Committee for Chair of Neurology, c/o Joyce McKinney, Office of the Dean, School of Medicine, University of California, San Francisco, San Francisco, CA 94143-0410.** UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are particularly urged to apply.

MANAGER, PRODUCT DEVELOPMENT. Supervise chemist in design of pharmaceutical soft gelatin capsule dosage for various medicinal drug products. Evaluate both chemical and pharmacological aspects of the drug products. Requires academic background in pharmacy, Ph.D. in medicinal chemistry, and 1 year of experience in job offered or 1 year of academic research experience in pharmacology. Salary: \$50,000 per year; 40 hours per week. Job site/interview: Chatsworth, California. Send this ad and résumé to: **Job #MD17569, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 16 September 1990.

ENVIRONMENTAL RESOURCES MANAGER. Seeking ecologist to supervise Environmental Division. Work involves environmental research, monitoring, management, planning, permitting, and public education primarily in aquatic and wetland habitats. M.S. in environmental biology and 3 years of experience; prefer Ph.D. Strong written, oral, computer, supervisory, scuba, and public contact skills are necessary. Salary: \$27,747.20 to \$42,536.00. Send résumé to: **City of Cape Coral, P.O. Box 150027, Cape Coral, FL 33915-0027, Attention: Personnel Department.**

BIOCHEMISTRY FACULTY POSITIONS UNIVERSITY OF WISCONSIN-MADISON

The University of Wisconsin-Madison Biochemistry Department invites applications for two tenure-track positions at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. We are particularly interested in applications from individuals whose research emphasizes metabolic regulation (assistant or associate professor level) or molecular neurobiology (assistant professor level); however, outstanding candidates in any area of biochemistry will be considered. The successful candidates are expected to develop vigorous independent research programs and participate in the undergraduate and graduate teaching of general and specialized biochemistry courses. Applications, including curriculum vitae, list of publications, summary of past work and accomplishments, and a statement of plans for future research, should be sent to: **Professor William S. Reznikoff, Chairman, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706.** In addition, applicants should arrange for at least three letters of reference to be mailed to the same address. Applicants should state in their cover letter for which position they wish to be considered. To assure consideration, all application materials should be received by 1 October 1990. *The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.*

FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology at the University of Alabama at Birmingham (UAB) invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** and **ASSOCIATE PROFESSOR** level available in the fall of 1990. Individuals will complement present faculty research and teaching interests in chemotherapy, particularly in the areas of cancer, AIDS and AIDS-related opportunistic infection. The successful applicant(s) will be expected to have potential to attract extramural support and be able to establish an independent research program. Associate professor candidates must demonstrate a strong research record with current funding. Responsibilities will also include teaching of medical/dental and graduate students. Send letter of application with curriculum vitae and three names of references to: **Dr. Robert B. Diasio, M.D., Professor and Chairman, University of Alabama at Birmingham, Department of Pharmacology, Box 402 Volker Hall, UAB Station, Birmingham, AL 35294.** UAB is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DIVE OPERATIONS SUPERVISOR. Head scientific dive department, including 5.5-million-gallon salt-water tank maintenance, all underwater activities, dive equipment, logs, safety, assistance with marine animal care; participate in active research. Requires extensive scientific diving experience, dive instructor certification, graduate degree or pursuit of one in ocean science field, knowledge of marine science, biology, oceanography, and specialized underwater equipment. Superb leadership skills and strong interest in interacting with all levels. Apply to: **Paul Buss, Professional Staffing, Walt Disney World Co., P.O. Box 10,000, Lake Buena Vista, FL 32830** by 30 September 1990.

MOLECULAR BIOLOGY OF MICROBIAL PATHOGENESIS JUNIOR OR SENIOR FACULTY POSITIONS AVAILABLE

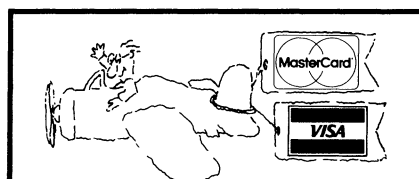
The Department of Microbiology and Immunology in the College of Medicine at The University of Tennessee, Memphis, invites applications for several junior or senior level, tenure-track positions focusing on significant problems in microbial pathogenesis using genetic and molecular approaches. Senior candidates should have a strong record of research accomplishment with sustained program growth and development. Junior candidates will be expected to develop a high quality, independent research program with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental, and graduate students. The University of Tennessee, Memphis, is well into a major growth phase. The department has recently moved into a completely renovated building and will be appointing at least five new faculty during the next several years. New faculty are also being appointed in the Departments of Anatomy, Pharmacology, and Biochemistry.

A large Center of Excellence grant has resulted in establishment of a Molecular Resource Center within the department featuring state-of-the-art facilities for: oligonucleotide synthesis, peptide synthesis, monoclonal antibody production, amino acid analysis, protein sequencing, polymerase chain reaction, molecular graphics, and flow cytometry. Funds for the initiation of research programs will be available and salaries will be highly competitive.

Applications will be received until 1 October 1990 or until the position is filled thereafter. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals, and three letters of reference to be sent to:

**Dr. Terrance G. Cooper
Department of Microbiology and Immunology
The University of Tennessee, Memphis
858 Madison Avenue, Room 801
Memphis, TN 38163**

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POSITIONS OPEN

WEST VIRGINIA UNIVERSITY FACULTY POSITION IN PHARMACOLOGY/TOXICOLOGY

West Virginia University invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Applicants should have a doctoral degree in pharmacology, toxicology, or related discipline and post-doctoral research experience. Research accomplishments and evidence of ability to develop independent, externally funded research will be prime considerations in the selection process. Applicants should submit curriculum vitae, including complete bibliography, and request three letters of reference be sent to: **Dr. Robert E. Stitzel, Department of Pharmacology and Toxicology, West Virginia University Health Sciences Center, Morgantown, WV 26506** by 1 October 1990. Preference will be given to applicants whose research focuses on cellular mechanisms, especially those related to ion transport processes. Teaching responsibilities require a broad knowledge of pharmacology.

West Virginia University is an Affirmative Action/Equal Opportunity Employer. Minority and women applicants are particularly welcome.

FACULTY POSITION

The Department of Biological Chemistry at The University of Texas Health Science Center at Houston, Dental Branch, has an opening for a tenure-track faculty member at the **ASSISTANT PROFESSOR** level. Candidates should hold a Ph.D. in biochemistry or in an appropriate related field and have at least 2 years of postdoctoral experience. The successful candidate will be expected to conduct independent research, to attract outside research support, and to participate in teaching of biochemistry to dental students. Preference will be given to individuals with research expertise and interest in mineralized tissues, calcium transport, odontoblast and osteoblast differentiation, and other areas related to oral tissues.

Send a cover letter, curriculum vitae, and names and addresses of three references to: **William T. Butler, Ph.D., Chairman, Department of Biological Chemistry, University of Texas Dental Branch, P.O. Box 20068, Houston, TX 77225.**

The University of Texas Health Science Center at Houston is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

DEVELOPMENTAL BIOLOGIST

St. Mary's College of Maryland is seeking a permanent, full-time developmental biologist to begin either in January or August 1991. Instructional responsibilities include courses in developmental biology, introductory biology, and specialty area. Strong commitment to undergraduate teaching and involving undergraduate students in research are both expected. Ph.D. required. Rank and salary based on level of experience. St. Mary's College of Maryland is a state-supported, liberal arts college with 1500 students. The college's waterfront campus is located in historic St. Mary's City, 70 miles southeast of Washington, D.C. Closing date for receipt of applications is 15 October 1990. Send curriculum vitae, three letters of reference, and statements of teaching/research interests to: **Dr. Robert Paul, Division Head, 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.*

UNIVERSITY OF QUEENSLAND LECTURER TENURABLE/LECTURER DEPARTMENT OF ANATOMY

The successful appointee will be required to contribute to the teaching of topographical and functional anatomy to students enrolled in subjects within the health and biological sciences. Applicants should have demonstrated a research capability in an area of functional anatomy or human biology and will be expected to supervise post-graduate students in these areas. **Reference No.: 40090.**

Further information is available from the Head of Department, telephone: 07-377-2722.

Salary: lecturer, \$33,163 to \$43,096 per annum; 5-year fixed term.

Closing date: 28 September 1990.

Please forward an original plus seven copies of application and résumé to: **Director, Personnel Services, The University of Queensland, Q1D 4072, Australia.**

Equal Opportunity in Employment is University Policy.

EMORY UNIVERSITY SCHOOL OF MEDICINE
Department of Microbiology and Immunology

CHAIR

Emory University School of Medicine invites nominations and applications for the position of Chair for the Department of Microbiology and Immunology. Responsibilities include the direction, management, and continuing development of a department committed to excellence in research and teaching in a university setting. The faculty has teaching responsibilities for the M. D. degree program of the Medical School and also for the Ph.D. degree programs offered through the Graduate School of Arts and Sciences. The department is located in ultramodern facilities in the Rollins Research Center on the Emory Campus and is adjacent to the Centers for Disease Control. The department has a very active research effort and candidates must hold an M.D. or Ph.D. degree with training in microbiology or immunology, and have a strong record in research. Previous academic and administrative responsibilities are required, as well as demonstrated leadership capabilities. Salary is negotiable. Applications should include a current curriculum vitae and the names of appropriate references, and should be submitted no later than October 1, 1990 to:

Microbiology and Immunology Search Committee
312 Woodruff Health Science Center
Emory University School of Medicine

Emory University is an Equal Opportunity/Affirmative Action Employer.

**DEPARTMENT HEAD
ECOLOGY, ETHOLOGY, AND EVOLUTION
UNIVERSITY OF ILLINOIS**

The University of Illinois at Urbana-Champaign invites nominations and applications for the position of Head of the Department and Professor of Ecology, Ethology, and Evolution. The department has 12 faculty and 12 affiliated faculty. The administration has made a strong commitment to further development of population biology and several new openings exist for recruitment of faculty members. Collaborative research opportunities are possible with the State Natural History Survey, Institute for Environmental Studies, Museum of Natural History, other departments in the School of Life Sciences, and departments in the Colleges of Agriculture and Veterinary Medicine. Campus facilities and resources available to the department include several nearby natural areas, including forest, restored prairie, and old-field habitats, collections in the Museum of Natural History, Herbarium, and State Natural History Survey, greenhouses, a National Center for Supercomputing Applications, a Biotechnology Center offering services for recombinant DNA technology and protein sequencing, and a Center for Genome Analysis.

We seek a person who holds a Ph.D. degree, has a distinguished, active research program in an area of population biology, such as theoretical population biology, population genetics, or behavioral ecology and has demonstrated leadership qualities. Submit nominations or applications with curriculum vitae and names and phone numbers of three references to:

Dr. Carol K. Augspurger, Chair
EEE Department Head Search Committee
University of Illinois
393 Morrill Hall
505 S. Goodwin
Urbana, IL 61801
Telephone: 217-333-1298; FAX 217-244-1224

In order to ensure full consideration, applications must be received by 1 October 1990. Salary is negotiable. Preferred starting date is 21 August 1991.

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

MALARIA PROJECT ASSOCIATE

American Association for the Advancement of Sciences (AAAS) Sub-Saharan Africa Program seeks International Public Health Specialist for year-long study of malaria prevention and control strategies in Africa, carried out by multidisciplinary working group of African and US scientists and practitioners.

Requirements for position include graduate degree related to international health, preferably tropical diseases. Broad background in public health and development issues desirable. Excellent research, writing, and managerial abilities necessary. Preference given to candidate with field experience in Sub-Saharan Africa. Candidate must be willing to travel abroad.

Twelve-month position, *available immediately*. Please send letter of interest and *curriculum vitae* to:

Mr. Gregory Stokes
Human Resources
AAAS
1333 H Street, N.W., Suite #850
Washington, D.C. 20005

FACULTY POSITION, MARINE SCIENCE

The Institute of Marine Science, School of Fisheries and Ocean Sciences, is seeking an outstanding scientist for a tenure track position in teaching and research in the area of oceanography with interest in remote sensing techniques. The position will be filled at the Assistant Professor level or above depending on background and experience. The successful applicant will be expected to develop a vigorous research program in oceanography oriented toward remote sensing of high latitude waters, as well as participate in teaching and guidance of graduate students. Examples of potential areas of research include primary production, environmental changes associated with global warming, or marine mammal migrations. The University of Alaska Fairbanks is developing a major remote sensing capability through the Alaska SAR facility that will offer new opportunities in this area of research. The Institute of Marine Science has a faculty of 26 with a graduate enrollment of 40-50 students. The faculty are involved in a variety of research programs emphasizing arctic and high latitude seas.

Applicants should send a summary of research interests with a curriculum vitae and the names, addresses, and phone numbers of three references to:

Donald M. Schell
Chair, Remote Sensing Search Committee
c/o Director's Office
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, AK 99775-1080

Closing date for applications is 15 October 1990. Applications of finalists may be subject to public disclosure. Persons hired must comply with the new employment provisions of the Federal Immigration Reporting Act. The University of Alaska is an Equal Opportunity/Affirmative Action Employer.

SENIOR MASS SPECTROSCOPIST

Analytical Sciences Department

Fisons Pharmaceuticals is a rapidly expanding multi-national ethical pharmaceutical company. The Analytical Sciences Department determines the chemical structure of all compounds synthesized in our medicinal chemistry research programs, the purity of metabolites and chemical impurities. Due to expansion of the Rochester facility, a vacancy now exists in Analytical Sciences for an experienced Mass Spectroscopist. Immediate duties will include the design of a new spectroscopy laboratory and the acquisition and implementation of additional spectrometers, including tandem quadrupole and magnetic sector instruments. The successful applicant will provide scientific leadership and be responsible for the work and growth of the Mass Spectroscopy Unit, and will be expected to maintain a state-of-the-art laboratory. Working in close collaboration with colleagues throughout the drug discovery and development process, the incumbent will design and interpret experiments to elucidate chemical structures. In addition to scheduling and operating our own excellent instrumentation, this incumbent will be expected to liaise with colleagues in Fisons analytical laboratories in the UK and to organize contract work. Excellent communication skills and a broad knowledge of synthetic and analytical chemistry are essential. Some supervisory experience would be helpful, as would a working knowledge of related technologies such as NMR, chromatography, and the latest MS interfaces and sample introduction systems.

The ideal candidate should possess a doctorate in chemistry, analytical science, spectroscopy or a closely related discipline, with additional graduate training in determining the structure of unknown species from a variety of chemical classes. Previous successful experience in a research-based pharmaceutical company is preferred, and analytical familiarity with small peptide molecules would be an advantage.

Fisons is located in Rochester, NY, an area noted for its excellent family environment, affordable housing, cultural attractions, and year-round recreational activities. We provide excellent salary and benefits in addition to opportunities for personal growth and professional advancement. Please send resume including salary history to: Employment Office, FIONS PHARMACEUTICALS, P.O. Box 1710, Rochester, NY 14603. Reference Ad #RRP 760.

FIONS

Fisons Pharmaceuticals Corporation

No Agency Referrals Please

We Are An Equal Opportunity Employer M/F/H/V

Sr. Research Scientist

R.W. Johnson Pharmaceutical Research Institute (PRI) is a first-class, worldwide drug research organization and a member of the Johnson & Johnson Family of Companies with the strength and backing to meet the challenges of today's competitive environment.

We currently have a key position for a highly-motivated professional with a PhD or equivalent in Microbiology or Molecular Biology and 2-5 years of experience in a microbiology laboratory. You'll perform research on mechanism of action of drugs and for new potential therapeutics; develop new approaches to discovery of potential clinical candidates; and conduct studies to evaluate possible licensing opportunities. Will also interact with Medicinal Chemistry to conduct structure activity relationships.

We offer a competitive salary and the comprehensive benefits you would expect from a Johnson & Johnson Company including our on-site LIVE FOR LIFE Wellness Program. Please forward your resume, including salary history, to: Mr. Thomas Hutton, Dept. 28A, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, New Jersey 08869-0602.

An Equal Opportunity Employer, M/F



R.W. JOHNSON

PHARMACEUTICAL RESEARCH INSTITUTE

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POSITIONS OPEN

BIOCHEMISTRY FACULTY POSITION UNIVERSITY OF WISCONSIN-MADISON

Applications are invited for an ASSISTANT PROFESSOR position in the Department of Biochemistry and the Department of Nutritional Sciences of the University of Wisconsin-Madison. Exceptional candidates at the ASSOCIATE PROFESSOR level will be considered. The successful candidate will be expected to develop a strong research program utilizing modern biochemistry to study problems of nutritional interest. This includes organismal and cellular nutrition. Duties include teaching the departments' graduate and undergraduate courses and the training of graduate and post-doctorate students. Applications including curriculum vitae, publication list, one-page summary of past accomplishments, and a one-page plan of future research should be sent to: **H. F. DeLuca, Chairman, Search Committee, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706.** Applicants must also arrange for three letters of recommendation to be sent to the same address. To assure consideration, complete applications should be received by 1 October 1990. *The university is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.*

SUMMER FACULTY POSITIONS IN THE SPACE LIFE SCIENCES TRAINING PROGRAM (SLSTP) A NASA PROJECT

Four PROJECT COUNSELOR positions are open in the 1991 SLSTP to be held at the Kennedy Space Center, Florida. Project counselors will be involved in the implementation of the 7-week-long program (starting mid-June 1991) activities for undergraduate science and engineering college students. An applicant must have a minimum of M.S. degree, preferably Ph.D. degree, and some experience of teaching and research in life sciences and related fields. If interested, please send a letter of application, complete curriculum vitae, and three letters of recommendation before 31 December 1990 to:

**Program Director
SLSTP**

**Florida A&M University
College of Pharmacy
and Pharmaceutical Sciences
106 Honor House
Tallahassee, FL 32307
Telephone: 904-599-3623/3636**

The Division of Pharmacology and Experimental Therapeutics at the University of Kentucky College of Pharmacy invites applications for a tenure-track FACULTY POSITION in the area of gene expression and molecular biology. Qualifications include a Ph.D. in biochemistry, pharmacology, or closely related discipline with relevant postdoctoral experience. While preference may be given to individuals complementing the division's current strengths in drug metabolism, neurosciences, and cardiovascular-pulmonary pharmacology, outstanding candidates with credentials in other contemporary areas are encouraged to apply. The successful applicant will be expected to establish an extramurally funded research program and to assume modest responsibilities for teaching at the undergraduate and/or graduate level. Rank, salary, and tenure status will be commensurate with experience. Candidates should submit curriculum vitae, a statement of research interests, and the names of three references no later than 15 October 1990 to: **Dr. Robert A. Blouin, Chair, Pharmacology Search Committee, University of Kentucky, College of Pharmacy, Lexington, KY 40536-0082.** *Equal Opportunity/Affirmative Action Employer.*

BONUS CIRCULATION FOR YOUR CLASSIFIED AD

Our issue of 5 October 1990 will be distributed to scientists attending two important meetings: IBEX (San Mateo, California, 23 to 25 October) and Expoquimia (Barcelona, Spain, 5 to 8 November). Deadline or submission of line classified ads: 20 September 1990.

**SCIENCE Classified Advertising
Telephone: 202-326-6555
FAX: 202-682-0816**

POSITIONS OPEN

PHYSIOLOGY FACULTY POSITION FALL 1990

The Department of Physiology and Neurobiology at the University of Connecticut is recruiting a lecturer to teach human anatomy and physiology (a two-semester course with lectures and laboratories) at the Torrington campus. The candidate will also play a major role in the development of our undergraduate curriculum in the health sciences department at the main campus in Storrs. This is a nontenure-track, full-time position subject to yearly renewal. Active research is not a part of this position. The salary will be commensurate with experience (up to the ASSISTANT PROFESSOR level); a Ph.D. is desired. Candidates should send curriculum vitae and the names of three references to: Professor G. Pilar, Head, Department of Physiology and Neurobiology, U-42, 75 North Eagleville Road, University of Connecticut, Storrs, CT 06269. Contact the department for a complete job description at 203-486-4326. *The University of Connecticut is an Affirmative Action/Equal Opportunity Employer. (Search #1A32.)*



Ecogen, Inc., an agricultural biotechnology company located in the Philadelphia area, has immediate openings for several positions in its microbial pesticide development group.

Individuals with B.S. or M.S. level training and experience in the following research areas are sought:

- Immunology/immunochemistry
- Molecular biology
- Microbial genetics/physiology
- Cell biology
- Fermentation technology
- Analytical protein chemistry

Interested candidates should submit a current résumé including the names, addresses, and telephone numbers of three references to:

Personnel Director
Ecogen Inc.
2005 Cabot Boulevard, West
Langhorne, PA 19047-1810
Ecogen is an Equal Opportunity Employer.

As a part of a major expansion over the next year, Diagon Corporation is seeking to fill several positions, to include the following:

- Ph.D.: Pharmacologist/endocrinologist with knowledge and experience in radioimmunoassay and biochemical enzyme assays.
- Ph.D.: Reproductive physiologist with strong biochemistry background.
- D.V.M.: Laboratory animal experience.
- M.S.: Biochemistry or biology with knowledge of biochemistry and some laboratory experience.
- B.S.: Several positions open. Experience in the following: immunology, endocrinology, radioimmunoassay, and diagnostic techniques.

Eligible applicants should submit curriculum vitae to: Martha O'Neill, Human Resources Manager, Diagon Corporation, 15215 Shady Grove Road, Suite 306, Rockville, MD 20850.

PLANT PATHOLOGISTS

Crop Genetics International seeks plant pathologists to join its expanding bioherbicide research team. The successful candidates will join a research team developing a novel weed control methodology based on the use of unique, plant-associated prokaryotes and chemical stressing agents. Research opportunities exist in the discovery, characterization, and evaluation of microorganisms; development of bioassay systems; and assessment of plant-microbe-herbicide interactions. Creative scientists with at least an M.S. in plant pathology and with demonstrated ability to direct their creativity to solving real world problems are encouraged to apply. Candidates should submit their résumé and the names of three references in confidence to:

Crop Genetics International
X-tend Discovery Team
7170 Standard Drive
Hanover, MD 21076

DIRECTOR, Animal Support and Lab Services

The Upjohn Company, a recognized leader in worldwide pharmaceutical and agricultural products research, is seeking a highly-qualified, highly-motivated veterinarian to assume the responsibilities of Director, Animal Support and Lab Services, in its Upjohn Laboratories Division, located in Kalamazoo, Michigan.

Principle responsibilities include the provision of veterinary medical and husbandry services, and establishment of policies and practices that ensure compliance with regulatory standards for the use and care of laboratory animals. The successful candidate will be responsible for directing a multi-disciplinary support group comprised of 70+ veterinary, technical service and animal care staff members.

Requirements include a DVM/VMD degree, ACLAM certification, and a minimum of 7 years experience managing an animal care program that has consistently maintained AAALAC accreditation. The candidate must have demonstrated interpersonal and communication skills. Successful experience directing a preventive medicine program keeping a large, diversified laboratory animal population in good health and free of disease is essential.

The compensation package will be commensurate with qualifications and experience, and includes relocation assistance. Upjohn offers a stimulating, multidisciplinary research environment at our modern laboratories in Kalamazoo. In 1989, Upjohn committed over \$400 million to research and development efforts and is presently increasing its main research facility by 50%. Qualified and interested candidates are encouraged to send a curriculum vitae and summary of academic and management experience in confidence to: THE UPJOHN COMPANY, CORPORATE RECRUITING/6002-HA, KALAMAZOO, MI 49001-9988. Please refer to position number 6002-HA in your cover letter. An Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...

Upjohn

Opportunities in New Drug Development PROJECT PLANNING AND MANAGEMENT Infectious Diseases, Oncology, and CNS Areas Director/Associate Director

Bristol-Myers Squibb is a worldwide leader in the research and development of novel pharmaceutical products. The Bristol-Myers Squibb Pharmaceutical Research Institute currently has challenging opportunities to make significant contributions to the interdisciplinary product development process of new drug development.

You will work closely with all of the functional groups involved in both preclinical and clinical development studies, as well as the Regulatory Affairs and Business Development Departments, to plan, implement, and monitor development activities from identification of a drug candidate to NDA approval and market launch. Specific responsibilities include working with multidisciplinary project teams and various development departments to prepare Interdisciplinary Development Plans and schedules for each new drug candidate, comprehensive Quarterly Status Reports for all worldwide development projects, and keeping projects on track.

Ideal candidates will have a PhD in the medical sciences (Pharmacology, Physiology, Microbiology, Immunology), and 7 to 10 years experience in pharmaceutical industry R&D, along with direct experience in anti-infectives, CNS or cancer R&D. Experience in project management and multiple drug development areas is desired, along with excellent interpersonal, organizational and communication skills.

We offer a stimulating scientific environment in our modern research facility in Wallingford, Connecticut. As part of a newly formed and growing department, you will have significant opportunity for growth and receive an excellent salary/benefits package. For confidential consideration, please forward your curriculum vitae to: Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. SL, P.O. Box 5101, Wallingford, CT 06492-7661. An equal opportunity employer, M/F/H/V.

**Bristol-Myers Squibb
Pharmaceutical Research Institute**



Bristol-Myers Squibb Company



ONCOGEN

ONCOGEN, a division of Bristol-Myers Squibb and a leader in biotechnology, performs research dedicated to pursuing novel approaches to the development of therapeutic products in the areas of immunology, infectious diseases and cancer. ONCOGEN is currently recruiting for the following positions:

Scientist, Assay Development

Responsibilities include development of biological and biochemical assays for growth factor, antibody and vaccine-related project utilization (including appropriate bench work); quantitative analysis of generated data and development of validation reports and documents; and supervision of technical staff. Requires PhD or MS, 4 to 5 years assay development experience, good understanding of EIAs (ELISAs) and functional biologic assays, and good writing and organizational skills. Understanding of computer systems helpful. Please reference position #90-052.

Scientist, Cell Banking/ GMP Production

Responsibilities include pilot scale production of GMP and research antibody grade lots and growth modulators; drafting and implementation of documents related to GMP cell banking and production; and biological and biophysical analyses for in-process testing to monitor production levels and product quality including ELISA, SDS-PAGE, Western blots and simple enzyme assays. Requires PhD or MS in biochemistry, cell biology or related field with experience in tissue culture and physical techniques in biochemistry. Documentation experience and familiarity with DOS, WORD, EXCEL or similar software desirable. Please reference position #90-045.

Manager, Scale-Up Processes

Focus will be on mammalian cell culture process development. Responsibilities include cell line optimization, cell banking, small scale GMP production, research material production and fundamental bioprocess R&D such as bioreactor process development; and recruitment and supervision of senior scientific staff. Requires PhD in cell biology or related field, 4 to 5 years' industrial experience, demonstrated supervisory skills, experience in scale-up of mammalian cells in a variety of bioreactors, and experience with producing therapeutic proteins under cGMPs. Please reference position #90-047.

ONCOGEN offers a creative work environment, competitive salaries and an excellent benefit package. Qualified applicants, please submit resume to: J. McGough, ONCOGEN, 3005 First Avenue, Seattle, WA 98121. An Equal Opportunity Employer.



A Bristol-Myers Squibb Company



ISIS

PHARMACEUTICALS

CAREER OPPORTUNITIES IN ANTISENSE THERAPEUTICS

REGULATORY AFFAIRS/DRUG DEVELOPMENT SENIOR SCIENTIST

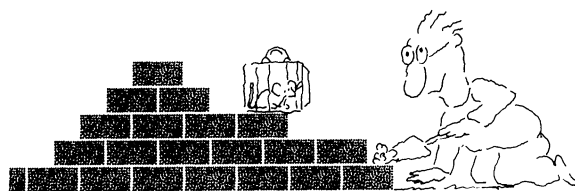
ISIS Pharmaceuticals, located in Carlsbad, CA, focuses on antisense oligonucleotide therapeutics. The company is seeking candidates for the position of Senior Scientist, Regulatory Affairs/Drug Development to work in areas relating to the preclinical and clinical development of antisense drugs derived from our Research and Drug Discovery Programs.

The successful candidate will coordinate, implement and document a variety of activities required for IND and NDA submissions. These will include: participation in the design of preclinical and clinical development strategies and plans, identification and selection of extramural investigators and laboratories to perform various development functions, budget negotiation, monitoring of ongoing studies, maintaining documentation and evaluating results, assisting in the development and monitoring of intramural GLP/GMP procedures, and preparation of regulatory documents.

Candidates must have a Ph.D. in the chemical or biological sciences, pharmaceutical industry experience and at least three years of drug development and regulatory experience. Outstanding oral and written communication skills are essential, as is the ability to work well as part of a multi-disciplinary team.

ISIS Pharmaceuticals offers a competitive salary, excellent benefits and equity participation. Please reply with curriculum vitae and names of references to: Christopher K. Mirabelli, Ph.D., Vice President, Research, ISIS Pharmaceuticals, 2280 Faraday Avenue, Carlsbad, CA 92008. An Equal Opportunity Employer.

We'll Help You Build A New Lab



Let the free Science product information service put you in touch with the vendors whose products you will need.

Simply write us a letter stating the specifics about your proposed lab and the instruments and supplies you need. We will do the rest. Write to:

SCIENCE Magazine
New Lab Service Department
1515 Broadway
New York, NY 10036

SCIENCE The Global Weekly of Research

TOXICOLOGIST

Lorillard, a leading manufacturer of tobacco products, has an immediate opening for a Toxicologist at our Greensboro, NC, Research Center.

The successful candidate's responsibilities will include participation in internal research and testing activities, primarily in the area of genetic toxicology, as well as protocol development, study monitoring, and report evaluation in an extramural toxicology testing program.

Requirements include a Ph.D. degree, 0-10 years experience, and excellent communication skills. An ability to accurately read, evaluate, and interpret scientific literature is required, as are the writing skills necessary to communicate key elements to others. A background in genetic and in vitro toxicity assessment is desirable.

Lorillard offers a comprehensive flexible benefits package, relocation assistance, and a competitive salary. Qualified candidates should forward their c.v. and salary requirements to:

Hallie S. Jessup

Lorillard
Research Center

Box 21688 Greensboro, NC 27420

An Equal Opportunity Employer M/F/H



Protein Crystallography at Monsanto

Protein crystallography positions are available at Monsanto for postdoctoral associates. You will work closely and collaborate with biophysicists, biochemists and molecular biologists on problems related to health care, animal nutrition and plant science. The positions also offer possibilities for training in genetic engineering techniques. Available projects include structure determinations of a tight complex between a protein hormone and a soluble fragment of its receptor; HIV protease complexes with synthetic inhibitors; substrate/inhibitor complexes of the glyphosate target, enolpyruvyl shikimate 3-phosphate synthase. The crystallography laboratories are equipped with two Rigaku 12 KW rotating anode generators, two dual chamber Xuong-Hamlin area detector systems and an AFC5 single crystal diffractometer. Computing and molecular graphics facilities include a CRAY X-MP EA/116se supercomputer, a VAX 11/780, an FPS-264 array processor, three Evans and Sutherland PS300 graphics terminals and a Silicon Graphics 4D25TG work station. Our salaries are competitive. Candidates with backgrounds in macromolecular crystallography are encouraged to apply; experience with low temperature crystallography or with data acquisition at synchrotron sources would be a plus. Candidates with exceptionally strong backgrounds in small molecule crystallography will also receive serious attention.

For consideration, please send resume and references to: J.B. Bussen; Manager, Human Resources; MONSANTO COMPANY; Mail Zone BB5B; 700 Chesterfield Village Parkway; St. Louis, MO 63198. For more information contact William Stallings, (314) 537-7236. Monsanto is an Equal Opportunity Employer M/F/H/V.

Careers for people with ideas

Monsanto

The Biomedical R&D Division of **GEO-CENTERS, INC.** has immediate openings for technical staff positions in support of our R&D activities at various facilities throughout the U.S. Applicants for all positions must possess U.S. Citizenship, and will be evaluated on their educational background and practical experience, as demonstrated by a solid publication record in the appropriate field.

Research Immunologist - Code 2164:

Great Lakes, IL A Postdoctoral level candidate is sought to conduct research on the development of immunoassays which are relevant to the diagnosis of oral infectious diseases. The successful candidate will possess extensive experience in cell-mediated immunology, and will have demonstrated practical expertise with associated laboratory techniques and procedures. Prior experience with assay development for oral pathogens is a definite plus.

Microbiologist/Immunologist - Code 2186:

Bethesda, MD A Postdoctoral level candidate is sought to conduct investigations involving the isolation and characterization of stem cells from HIV/SIV seropositive subjects. The ideal candidate will possess a recent PhD in Microbiology or Immunology, and will have 2-3 years of demonstrated practical experience in culturing cells infected with infectious agents. Previous experience with HIV infected samples and P-2 level facilities is considered a plus. Candidates will also be evaluated on communications (oral and written) skills.

Immunology Technicians (3 Positions) -

Code 2187: Bethesda, MD Support staff members are sought to assist our senior research staff in research activities relating to cell culture and analysis of HIV/SIV infected cell lines. Qualified candidates will possess a BS degree in Microbiology or Immunology, and 2-3 years' practical experience (or an MS degree) with HIV infected cell lines.

Biochemistry Technician - Code 2188:

Bethesda, MD A support staff member is being sought to assist senior staff in the preparation of gels, blots, etc. Qualified candidates will have a BS degree in Biochemistry or a related field, and will require a minimum of 2 years of demonstrated practical laboratory skills.

GEO-CENTERS, INC. offers competitive salaries, and an excellent relocation and benefits package. Qualified applicants should send their resumes, salary history, and references, in confidence, to: **GEO-CENTERS, INC.**, 10903 Indian Head Highway, Fort Washington, MD 20744, Attn: Deborah Hall-Greene/Code _____ (Please indicate the appropriate code). An Equal Opportunity/Affirmative Action Employer.



GEO-CENTERS, INC.

POSITIONS OPEN

IMMUNOLOGIST. Responsible for scientific leadership and supervision of a laboratory involved in the study of inflammatory and immunologic potential of corneal epithelial cells, keratocytes, and lymphoreticular cells in a rat model of vitamin A deficiency. Emphasis is on the detection and identification of cytokines, particularly interleukins which can regulate chemotaxis and the release of proteolytic factors responsible for tissue degradation. Minimum requirements include an M.D. or Ph.D. in biological sciences and 6 months of postdoctoral experience in immunology, including corneal inflammation and immunity and cytokine research. Also required is expertise in designing and interpreting biological assays, immunocytochemistry, ELISA, RIA, immunoblotting, flow cytometry, and initiation and maintenance of primary cultures and cell lines. Salary range is \$25,000 to \$30,000 per year for a 5-day, 37-hour week. Qualified applicants should respond with résumé in duplicate to: J.O. #00841, Massachusetts Department of Employment and Training, Special Programs Department, 19 Staniford Street, Boston, MA 02114.

POSTDOCTORAL POSITION. Position in radiology contrast agent development available immediately. U.S. citizen or permanent resident. Projects include development and testing of novel contrast agents for CT scanning of the liver and spleen. Background in pharmacology or toxicology preferred. Contact: Dr. Steven E. Seltzer, Department of Radiology, Harvard Medical School, Brigham and Women's Hospital, 72 Francis Street, Boston, MA 02115. Telephone: 617-732-6301. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS. Available to study the regulation of the intracellular phospholipases that mediate stimulus-response coupling in mammalian cells. Projects include delineation of the mechanisms responsible for the activation of intracellular phospholipases A₂ as well as studies directed toward their cloning, expression, site-directed mutagenesis, and intracellular processing. Candidates should be recent Ph.D.'s with experience in protein chemistry, lipid chemistry, or molecular biology. Send curriculum vitae and the names of two references to: Richard M. Gross, M.D., Ph.D., 660 South Euclid, Box 8020, Washington University, St. Louis, MO 63110.

POSTDOCTORAL POSITION, MOLECULAR ENDOCRINOLOGY. Dana-Farber Cancer Institute, Harvard Medical School. The Dana-Farber Cancer Institute is seeking to fill a research position at the postdoctoral level for studies on the regulation of hepatic P-450 genes by pituitary-dependent hormones. Prior research experience in molecular and/or cell biology is highly desirable. Joint appointment will be held in the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School. Flexible start date. Send curriculum vitae, representative publications, and names of three references to: Dr. David J. Waxman, JF-525, Dana-Farber Cancer Institute, Harvard Medical School, 44 Binney Street, Boston, MA 02115. An Affirmative Action/Equal Opportunity Employer.

NUMERICAL OCEAN CIRCULATION MODELING. Institute of Marine and Coastal Sciences, Rutgers University. Applicants are sought for one or more **POSTDOCTORAL POSITIONS** in numerical ocean circulation modeling. Current group activities include: (i) coupled physical/biological modeling of the California Current System and other eastern boundary current regimes; (ii) basin-scale modeling of the wind and thermally driven ocean circulation in the North Atlantic and North Pacific oceans; and (iii) development and application of advanced ocean circulation models having novel physical (e.g., intermediate equation), numerical (spectral finite element), and/or computational (massively parallel) design. Candidates should have a Ph.D. in physical oceanography, computational fluid dynamics, or a closely related field, as well as experience with supercomputers and Unix workstations. Send letters of interest with current curriculum vitae, a statement of research interests, and the names of three references to:

Professor Dale B. Haidvogel
Institute of Marine and Coastal Sciences
Rutgers University
Post Office Box 231
New Brunswick, NJ 08903-0231

Rutgers University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



UNIVERSITY OF MANITOBA
FACULTY OF MEDICINE

POSTDOCTORAL POSITION

Available for training in neurochemistry/neurobiology related to cholinergic systems and the role of membrane phospholipids and their phospholipases in signal transmission. Some experience in enzymology and molecular biology useful.

Send curriculum vitae and names of references to:

Dr. J. N. Kanfer
Department of Biochemistry and Molecular Biology
Faculty of Medicine
University of Manitoba
770 Bannatyne Avenue
Winnipeg, Manitoba, Canada R3E 0W3

POSTDOCTORAL POSITION. Available immediately to study intracellular organellar calcium pumps using molecular, biochemical, and cellular approaches. Experience in molecular biology or membrane protein biochemistry is desirable; U.S. citizenship or permanent residency status required. Send résumé, a brief statement of interests, and the names of three references to: Jonathan Lytton, Ph.D., Renal Division, Brigham and Women's Hospital and Harvard Medical School, 75 Francis Street, Boston, MA 02115.

POSTDOCTORAL FELLOWSHIP IN AIDS RESEARCH AT THE UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD)

The AIDS research group at the University of California, San Diego, announces the availability of postdoctoral training fellowship for both U.S. citizens and foreign nationals who plan to return to their native country at the completion of training. Research interests of the participating faculty members include molecular virology, AIDS pathogenesis, molecular immunology, animal models, and drug development. The research will be conducted in state-of-the-art facilities, including the newly constructed Clinical Sciences Building on the La Jolla campus.

Participating faculty include D. Carson, R. Kornbluth, D. Looney, M. Lotz, D. Mosier, D. Richman, D. Spector, S. Spector, W. Wachsman, C. Wiley, and F. Wong-Staal.

U.S. citizens address inquiries to:

Douglas D. Richman, M.D.
Department of Medicine, V-111-F
University of California, San Diego
La Jolla, CA 92093

Foreign nationals address inquiries to:

Dennis A. Carson, M.D.
Department of Medicine, S-045
University of California, San Diego
La Jolla, CA 92093

UCSD is an Equal Opportunity Employer.

THEORETICAL NEUROBIOLOGY

The Neurosciences Institute (NSI) invites applications for positions as **INSTITUTE FELLOWS** in Theoretical Neurobiology. The NSI supports an inhouse research program dedicated to developing experimentally testable theoretical models of neural systems. Current models include simulations of pharmacological effects on neuronal networks, the design of network automata, and analysis of visual systems. Advanced supercomputer facilities are available.

Institute Fellows are appointed for 2 years with the possibility of renewal, and receive stipends that depend on qualification and experience. Applicants should be at the postdoctoral or assistant professor level, and must have a background in experimental or theoretical neuroscience or related fields.

The NSI is an independent organization located on the campus of The Rockefeller University in New York City. The NSI serves as the home of the Neurosciences Research Program and is an international center of study and research for distinguished visiting neuroscientists. Fellows have opportunities to use the Institute's extensive facilities and to interact with visiting scientists.

Applicants should send a short statement of research interests, curriculum vitae, and the names of three references to: Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 1230 York Avenue, New York, NY 10021.

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study the hormonal regulation of gene expression in plants. Experience in basic molecular techniques such as mRNA isolation, Northern analysis, and others are required. Send curriculum vitae and names of three references to: Dr. R. N. Artica, Pennsylvania State University, Department of Horticulture, University Park, PA 16802. Telephone: 814-863-2252. An Affirmative Action/Equal Opportunity Employer.

Three **POSTDOCTORAL POSITIONS** to study (i) molecular biology of skin cytochrome P-450 and skin cancer, (ii) skin photosensitization and photodynamic therapy of skin cancer, and (iii) diet and cancer chemoprevention. Ph.D. with relevant experience desirable. Send curriculum vitae with names of references to: Professor Hasan Mukhtar, Research Director, Department of Dermatology, Case Western Reserve University, Cleveland, OH 44106.

POSTDOCTORAL. A 1-year appointment with opportunities for renewal for a second and third year, for an inorganic chemist to do exciting and challenging work in Tc-99m and Re-186 radiopharmaceutical research and development, while working with seven Ph.D. inorganic chemists under the direction of Dr. Edward Deutsch. This position will provide an ideal opportunity for the candidate to gain experience and training in both radiopharmaceutical development in an industrial setting and in the use of pharmacological structure-activity relationships. The successful candidate will have experience in inorganic and organic synthesis; experience with biochemistry and/or the use of radiation is desirable. Send résumé, three letters of recommendation, and transcripts to: Dr. Dennis Nosco, Mallinckrodt Medical, Inc., 675 McDonnell Boulevard, St. Louis, MO 63042. Equal Opportunity Employer.

POSTDOCTORAL POSITION, BIOCHEMISTRY AND MOLECULAR BIOLOGY OF PROTEINS. Funded position to study structure-function relationships in tropomyosin and troponin C using site-directed mutagenesis. Experience in protein biochemistry and/or recombinant DNA is desirable. Send curriculum vitae, research interests, and the names of three references to: Dr. Sarah Hitchcock-DeGregori, Department of Neuroscience and Cell Biology, University of Medicine and Dentistry of New Jersey (UMDNJ), Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.



POSTDOCTORAL POSITION MOLECULAR GENETICS HARVARD SCHOOL OF PUBLIC HEALTH

A position is immediately available to study the regulation of genes induced by oxidative stress in *E. coli*. Research training includes identification of promoters, purification of regulatory proteins, and characterization of the interactions between them. Knowledge of molecular biological techniques preferred; experience with protein purification is a plus. Send curriculum vitae, a statement of research interests, and names of three evaluators by 15 October 1990 to: Dr. Spencer Farr, Laboratory of Toxicology, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH SCIENTIST

Postdoctoral research scientist with suitable experience in techniques used to study the electrophysiology and pharmacology of the in situ canine heart and also techniques used to evaluate antiarrhythmic drug action on isolated cardiac tissues and single cardiac myocytes for grant-supported studies on mechanisms of action of antiarrhythmic drugs. Familiarity with electrocardiography and clinical cardiology desirable. Applicants should send research interests, curriculum vitae, and three letters of recommendation to: Dr. Brian F. Hoffman, Chairman, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

BRISTOL-MYERS SQUIBB COMPANY CENTRAL NERVOUS SYSTEM RESEARCH

Bristol-Myers Squibb is a worldwide leader in the research and development of novel pharmaceutical products. Our success is derived from a commitment to scientific research, and our future will be molded by individuals who strive for scientific excellence and innovation.

The Central Nervous System Drug Discovery group, located in Wallingford, CT, will undergo a significant expansion throughout 1990-1991, with positions available at Ph.D., and non Ph.D. levels. Specific additions to our staff will include individuals from the following disciplines:

Behavioral Pharmacologists

Several positions are available for Ph.D., B.S./M.S. individuals skilled in assessing the psychotropic activity of compounds through the use of behavioral models. Areas of importance include anxiety, depression, schizophrenia, facilitation of cognitive processes, and recovery of function following CNS trauma.

Neurochemists and Electrophysiologists

We are specifically seeking a Ph.D. skilled in the use of microdialysis techniques applied to the serotonergic and dopaminergic systems. An opportunity for a Postdoctoral Fellow with interests in serotonin receptor/G-protein

interactions is also available. B.S./M.S. positions are available to investigate the receptor binding of novel compounds, perform isolated tissue studies, and to apply in vitro/in vivo electrophysiological recording techniques to explore the mechanism of action of potential CNS drugs.

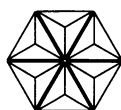
Cell and Molecular Neurobiology

Opportunities are available for Ph.D. and B.S./M.S. candidates with expertise in gene cloning and mammalian/bacterial expression systems, particularly as related to CNS receptor sites. B.S./M.S. positions are available for cell biologists to support in vitro tissue culture work, transgenic animal work, and for individuals with general molecular biology/biochemistry skills including nucleic acid manipulation, protein purification and enzyme assays.

We offer excellent research facilities in superbly equipped laboratories in a modern research complex, an excellent salary and comprehensive benefits package, and a commitment to the development of novel CNS drugs.

To apply, please send resume and salary history to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. SS-SC/CNS, P.O. Box 5101, Wallingford, CT 06492-7661.** An equal opportunity employer, M/F/H/V.

**Bristol-Myers Squibb
Pharmaceutical Research Institute**



Bristol-Myers Squibb Company

Post Doctoral Fellow Research Associate Neuroimmunology

NOVA PHARMACEUTICAL CORPORATION, a leading Research & Development company in Baltimore, MD, seeks a Ph.D. scientist to participate in a study examining HIV-1's actions in the central nervous system. Emphasis is on neurochemical mechanisms involving AIDS-associated neuropathy.

The ideal candidate will have a Ph.D. with a strong background in radio-receptor binding, ion channels, second messenger systems and tissue culture. A working knowledge of immunology is desirable. This position is NIH funded for 2 years.

NOVA PHARMACEUTICAL CORPORATION offers a competitive salary and benefits package which includes company-paid health, life and dental insurance; profit sharing; 401(k) plan. For immediate consideration, please send your resume along with a brief statement of research experience and interests, and the names of three references to: **NOVA PHARMACEUTICAL CORP., Personnel-90-070, 6200 Freeport Centre, Baltimore, MD 21224.** Nova is an equal opportunity employer offering a smoke-free work environment.



POSTDOCTORAL FELLOW

PATHOLOGY/TOXICOLOGY

The Department of Pathology and Toxicology, SmithKline Beecham Pharmaceuticals, is seeking a Postdoctoral Fellow to study the comparative pathogenesis of biliary epithelial cell hyperplasia. The Fellow will have a unique opportunity to join a multidisciplinary team from Experimental Pathology, Toxicology and Drug Metabolism, thereby gaining broad exposure to preclinical development in the pharmaceutical industry. The team will investigate potential mechanisms contributing to chemically-induced biliary epithelial cell injury and repair. The successful candidate will investigate the structural and functional alterations associated with biliary epithelial cell injury and relate these changes to hepatic metabolism and biliary excretion of xenobiotics.

A Ph.D. in Pathology, Toxicology, Biochemistry or a related field is required. Relevant experience in hepatobiliary physiology, or knowledge of *in vivo* or *in vitro* techniques to investigate hepatobiliary disease is desirable. The successful candidate will be expected to present the results of their work at national meetings and publish in peer-reviewed journals.

Based in a new state-of-the-art research facility in suburban Philadelphia near Valley Forge, SmithKline Beecham provides a stimulating and challenging scientific environment in which to grow and excel. We offer an attractive compensation/benefits and relocation package. Please send resume to H.R. McConnell E153 Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.

SB
SmithKline Beecham
Pharmaceuticals

CONSERVATION COORDINATOR AUSTRALASIAN SPECIES MANAGEMENT PROGRAMME

THE ORGANISATION

Zoos & Aquariums in the Australasian region are committed to jointly managing their animal collections in support of conservation. Accordingly, the Australasian Regional Association of Zoological Parks and Aquariums (ARAZPA) and the Council of Governing Bodies of Australasian Zoos (COGBAZ), have together established the Species Management Coordinating Council (SMCC). The SMCC is responsible to its contributing institutions for the development of species management policies, procedures and plans and for assisting institutions in their implementation.

THE POSITION

We are seeking a qualified, experienced scientist/manager to lead the development of conservation strategies for the Zoos and Aquariums of the Australasian Region. The successful applicant is expected to have or be willing and able to quickly acquire technical competencies of a high order in population genetics and conservation biology and microcomputing. Preference will be given to applicants with a sound working knowledge and experience of international wildlife conservation. The ability to negotiate complex international agreements between organisations is required. Experience in or aptitude for grant writing and other fund-raising is highly desirable. The Conservation Coordinator is required to train and motivate others and to achieve results at all levels from practical to policy.

The Conservation Coordinator is responsible to the SMCC, functions as its chief executive and is accountable for the day to day administration of the Australasian Species Management Programme, the development of regional conservation strategies and coordination with similar national, regional and global programmes involving zoos, aquariums and field conservation organisations.

THE LOCATION

The Office of the Australasian Species Management Programme will be established in serviced premises in an Australian capital city (Sydney, Melbourne, Perth, Adelaide) to be determined through negotiation with the successful applicant. The Conservation Coordinator will travel regularly interstate and occasionally overseas.

SALARY & CONDITIONS

Appointment will be at a salary in the range of A\$43,984 – A\$51,015 p.a. (comparable to Australian Universities Senior Lecturer Range) depending upon qualifications and experience. Contribution to a Superannuation Scheme is negotiable. 4 weeks annual leave, 10 days paid sick leave p.a., 13 weeks long service leave is due after 10 years.

ENQUIRIES

Further details of the position are available from **John DeJose, Director, Perth Zoo**, P.O. Box 489, South Perth, 6151, Western Australia or FAX 09-367-3921 or by phoning 09-367-7988.

Applications addressing the selection criteria should be forward to **Dr. Robert Baker**, Chairman, Conservation Coordinator Selection Committee, Adelaide Zoo, Frome Road, Adelaide, South Australia, 5000, Fax 08-239-0637 by 1 October 1990.

PROFESSOR OF BIOENGINEERING AND PHYSIOLOGY

The Harvard School of Public Health, Department of Environmental Health is seeking a Professor of Bioengineering and Physiology in the area of respiratory biology. A PhD or MD is required. The successful candidate should be well-established in applying the tools of engineering science to investigation of respiratory system function and dysfunction. He or she must have demonstrated research, administrative, and teaching skills.

Active areas of research should include both experimental and theoretical investigations of fundamental issues in fluid flow in the respiratory tract, material properties of the lungs and chest wall, and connective tissue mechanics. The successful candidate should also be able to contribute to various ongoing aspects of research into air pollution exposure assessment and control.

The Harvard School of Public Health is committed to increasing representation of women and minority members among its faculty and particularly encourages applications from such candidates.

Send resume, names of three references, and three representative publications to:

Dr. Joseph J. Harrington
ad hoc Senior Search Committee
Division of Applied Sciences
Harvard University
Pierce Hall 113
Cambridge, MA 02138

POSTDOCTORAL AND PREDOCTORAL Research Positions Available in Regulation of Gene Expression at Vanderbilt University School of Medicine

Fellowships are available immediately to support research studies in the area of molecular mechanisms of gene regulation. Positions are available in the labs/research areas listed below. Collaborative research projects between laboratories are particularly encouraged. Interested persons should contact Dr. Chalkley directly at the address given.

The available research laboratories and research topics are:

Wayne Anderson – Three dimensional structure of proteins involved in transcription.

Roger Chalkley – Developmental control of chromatin structure in gene expression.

Daryl Granner – Hormonal regulation of gene transcription and mRNA stability.

Mark Magnuson – Tissue specific expression and regulation of the glucokinase gene.

Roland Stein – Regulation of insulin gene expression in mammalian cells.

Tony Well – Molecular genetic analyses of yeast general transcription initiation factors.

Dr. Roger Chalkley
Department of Molecular Physiology and Biophysics
Vanderbilt University
School of Medicine
Nashville, Tennessee 37232

Tel.-615-322-7051
Fax-615-322-7236

Vanderbilt University is an equal opportunity/affirmative action employer.

Call for Nominations

The Roger J. Williams Award in Preventive Nutrition

This award is presented for outstanding contributions to the prevention of disease and promotion of health through nutrition. The award, which includes a cash prize of \$5,000, commemorates the pioneering nutritional research of Roger J. Williams, Ph.D., founding director of the Clayton Foundation Biochemical Institute of the University of Texas at Austin. Nominees will be considered in terms of the magnitude of their contributions to any aspect of preventive nutrition. The award is made possible through the generosity of Mr. and Mrs. E. Bruce Street, Sr. of Graham, Texas.

Nominations for the award should include: (1) the nominee's name and address; (2) a description of the contributions of the nominee relevant to preventive nutrition; and (3) a statement of the social and scientific impact of these contributions. The name, address, telephone number and signature of the individual making the nomination should be included.

Please submit nominations
by November 1, 1990 to:

Screening Committee
The Roger J. Williams Award in Preventive Nutrition
Texas College of Osteopathic Medicine
3500 Camp Bowie Blvd.
Fort Worth, Texas 76107-2690 USA
FAX Number 817-735-2283

Protein Biochemist

Pitman-Moore, Inc., one of the fastest growing animal health companies in the world today, is presently seeking a Protein Biochemist for its R&D Technical Center located in Terre Haute, Indiana.

The person we seek should have an M.S. degree in protein biochemistry or equivalent laboratory experience. The position requires working knowledge and experience in preparation of protein digests, HPLC separation of proteins and peptides, and interpretation of tryptic peptide maps. Knowledge of protein sequencing (ABI 477A and ABI 473) and amino acid analysis is also desirable. The position also requires excellent verbal and written communication skills.

As a member of the Bioanalytical Research Section, this individual will join a dynamic research group that is solving problems related to biotechnology, drug delivery, and new product development.

Pitman-Moore offers a highly competitive compensation and benefits package. Those interested in receiving confidential consideration for this position should forward their resume and salary expectations to the attention of Mr. M. G. Ray, Pitman-Moore, Inc.

P.O. Box 207
Terre Haute, IN 47808.

PITMAN-MOORE, INC.
An Equal Opportunity Employer



Molecular Genetics Senior Scientist

Crop Genetics International, a leading agricultural biotechnology company located in Maryland close to Washington, D. C. and Baltimore, has an opening in the Bacterial Molecular Biology Group. The scientist will be part of a team working to develop novel delivery systems for microbial biopesticides. The InCide™ approach uses genetically engineered bacteria, which colonize the vascular systems of major crop plants, to deliver agents effective against plant pests.

The successful candidate will have a Ph.D. in Molecular Biology, Microbiology or Biochemistry, with experience in the regulation of gene expression using recombinant DNA technology. Experience in bacterial physiology and/or non-conventional bacteria is desirable.

To apply, forward a curriculum vitae in confidence and the names of three professional references to Dept. MG8.



**Crop Genetics
International**

Dept. MG8
7170 Standard Drive
Hanover, MD 21076

An Equal Opportunity Employer

Scientists

Civilian Employment Opportunities Department of National Defence

If you are a recent or upcoming graduate of an advanced university program in the natural or social sciences or a related field, consider this opportunity to apply your expertise as a civilian scientist with DND. You will join a team of over 580 talented professionals who enjoy rewarding careers in applied research and development; social, economic and strategic analysis; and operational research.

Positions are currently available or anticipated near Halifax (Nova Scotia), Quebec City (Quebec), Ottawa (Ontario), Toronto (Ontario), Medicine Hat (Alberta) and Victoria (British Columbia) in the following fields:

Biology - microbiology, pharmacology, toxicology, physiology, biophysics and radiobiology

Chemistry
Computer Science

Economics

Engineering (except forestry and geology)

Military History

Mathematics - applied mathematics and operational research

Physics

Experimental Psychology

Political Science - strategic studies and international relations

Sociology

To qualify, you must possess or be completing a master's or doctorate degree from a recognized university, with high academic standing in one of the above fields. Due to the nature of the work, all employees require a security clearance. Preference will be given to Canadian citizens.

Starting salaries range from \$30,000 to \$45,000, commensurate with your position and qualifications. Benefit levels and salary advancements are fully competitive.

To apply, forward your resume and/or application form to the address listed below, indicating your primary field of interest. Please enclose copies of all your academic transcripts and the names and addresses of three individuals who may be contacted in reference to your professional abilities.

**Director of Scientific, Academic and Managerial
Appointments, National Defence Headquarters, Ottawa,
Ontario Canada K1A 0K2. Attention: DSAMA 3-2.**

We are committed to Employment Equity.

Canada



National Defence

Défense nationale

POSITIONS OPEN

HUMAN MOLECULAR GENETICS

POSTDOCTORAL POSITION. Opportunity to join an active research group involved with the cloning and analysis of the human fragile X site; the isolation of candidate genes for X-linked genetic diseases; and the high resolution genomic analysis of human Xq28. Demonstrated ability in gene cloning, chromosome walking, cDNA library construction, and/or human linkage analyses is highly desirable.

Send curriculum vitae, reprints, other supporting documents, and three letters of reference to: **Dr. Stephen T. Warren, Department of Biochemistry, Rollins Research Center, Emory University School of Medicine, Atlanta, GA 30322.** *Emory University is an Affirmative Action/Equal Opportunity Employer.*

UNIVERSITY OF WISCONSIN-MADISON POSTDOCTORAL RESEARCH

Opportunity for recent Ph.D. with training in molecular biology to collaborate in NIH-supported studies on virulence gene expression in the pathogenic African trypanosomes. Support for up to 5 years; position open immediately. Send letter of inquiry and copy of curriculum vitae to:

Dr. John M. Mansfield
Laboratory of Immunology
Department of Veterinary Science
1655 Linden Drive
University of Wisconsin
Madison, WI 53706

MICROBIOLOGISTS

POSTDOCTORAL/RESEARCH SCIENTIST. Geo-Microbial Technologies, Inc. (GMT), an established, independent research company, seeks qualified Ph.D. level microbiologists at both postdoctoral and research scientist levels. Experience in microbial geochemistry, environmental microbiology, and/or physiology is desirable. Located in Tulsa area, GMT offers the opportunity to join an existing research team and generate independent research in a well-equipped research environment. For immediate consideration, please send résumé to: **D. C. Hitzman, Geo-Microbial Technologies, Inc., P.O. Box 132, Ochelata, OK 74051.**

RESEARCH ASSOCIATE (POSTDOCTORAL). Genetic and metabolic regulation of deoxyribonucleotide and DNA synthesis in mammalian cells, in the Department of Biochemistry and Biophysics at Oregon State University (OSU), Corvallis, Oregon. Starting date: around 1 January 1991. Ph.D. in biochemistry or related field. Experience with cell culture, HPLC, radioisotopes, and enzymology desired. Send complete curriculum vitae, copies of recent publications, and names of three references to: **Dr. Christopher K. Mathews, Department of Biochemistry and Biophysics, Oregon State University, Weniger 535, Corvallis, OR 97331-6503.** Salary range: \$19,000 to \$22,000. Applications accepted through 15 October 1990. *OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. OSU is sensitive to the needs of dual-career couples.*

UNIVERSITY OF MIAMI DEPARTMENT OF RADIATION ONCOLOGY

The Department of Radiation Oncology has an immediate opening for an innovative, interactive junior level scientist (**RESEARCH ASSOCIATE, POSTDOCTORAL ASSOCIATE, or RESEARCH INSTRUCTOR/ASSISTANT PROFESSOR** (nontenure track) with a background in radiation biology (hypoxic cell sensitizers) cytokine biology (microvascular physiology), and/or experimental therapeutics (radiation-drug interactions) to join an interdisciplinary group investigating cytokine-mediated microvascular injuries in solid tumors. A relevant Ph.D. is required. Preference will be given to candidates who have demonstrated productivity and a strong potential to develop a rigorous research program and outside funding. Salary and appointment will depend on experience and qualifications. Send curriculum vitae, a short statement of research interests, and the names, telephone numbers, and addresses of three references to: **Dr. Paul G. Braunschweiger, Director, Experimental Radiation Oncology Program, Department of Radiation Oncology (D-31), University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101.** Telephone: 305-549-7885. FAX: 305-545-7884. *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RESEARCH ASSOCIATE, POSTDOCTORAL

To investigate the structure, regulation of expression, and function of microtubule-associated proteins (MAPs). Experience in the biochemical purification and cDNA cloning of mammalian MAPs is essential. Send curriculum vitae and three references to: **Professor Nicholas Cowan, Department of Biochemistry, New York University Medical Center, 550 First Avenue, New York, NY 10016.** *An Equal Opportunity Employer, M/F.*

RESEARCH ASSOCIATE IN MOLECULAR VIROLOGY

The Infectious Diseases Division, Department of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania, invites applications for the above position. Candidates require doctorate and experience in molecular virology. Laboratory to be developed will focus on molecular retrovirology. Position immediately available. Faculty rank to be determined by credentials.

Forward curriculum vitae and ten references to: **Dr. Roger J. Pomerantz, Director, Division of Infectious Diseases, Department of Medicine, Jefferson Medical College, 1025 Walnut Street, Philadelphia, PA 19107.** *Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE. To assist in study of behavioral treatment of transient myocardial ischemia. M.D. and 3 years of experience in cardiology. To perform exercise stress testing, psychometric testing, physical examinations, ambulatory ECG monitoring, data entry. Experience with MUGA desirable. Salary: \$21,000 plus fringe benefits; 40 hours per week. Apply to: **Employment Security Commission, 516 North Mangum Street, Durham, NC 27701** or your local Job Service Office. Refer to: **Job Order # NC3000159, DOT Code 090.227-010.**

RESEARCH ASSOCIATE

Position available for a research associate at the University of South Florida, Tampa, Florida.

Applications are invited for a molecular biologist (or related field) with experience in cloning, gene probe development, and PCR to conduct research on cryptosporidium and water-borne disease.

Qualifications: Ph.D. in molecular biology or related field with experience in the isolation and analysis of DNA and RNA, cloning, gene probe development, and PCR. The individual must have hands-on experience with most of the common molecular methods.

Two-year funding; full-time, 12-month appointment. Salary range: \$18,500 to \$22,500 with benefits.

Application deadline: 28 September 1990.

Send curriculum vitae and three letters of reference to:

Dr. Joan Rose
University of South Florida
College of Public Health
13301 Bruce B. Downs Boulevard, MHH 104
Tampa, FL 33612

The University of South Florida is an Affirmative Action/Equal Opportunity Institution.

ENVIRONMENTAL PLANT PHYSIOLOGIST UNIVERSITY OF CALIFORNIA RIVERSIDE

A position is available for an environmental plant physiologist at the Statewide Air Pollution Research Center (SAPRC), University of California, Riverside, on or after 1 November 1990. The position will be on a fiscal-year basis, at the **ASSISTANT RESEARCH PLANT PHYSIOLOGIST** level. First-year appointment will be fully supported by SAPRC; in subsequent years part of the salary will come from grants and contracts. Responsibilities include cooperating in current programs of research on effects of air pollution on crop plants, native vegetation, and/or forest trees. The successful applicant will be expected to submit proposals for new projects. Applicants must have a Ph.D. in plant physiology or a related field; experience in environmental physiology, including fieldwork; and good organization and communication skills. Send letter of application, curriculum vitae, statement of research interest, transcripts, and have three letters of recommendation sent to: **Dr. Patrick McCool, Chair, Search Committee, Statewide Air Pollution Research Center, University of California, Riverside, CA 92521.** Application deadline is 30 September 1990. *The University of California, Riverside, is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

POSITIONS OPEN

RESEARCH ASSOCIATE. For university in central Ohio. Designs, executes, and controls laboratory research project examining hormonal regulation of gene expression in developing chicken retina. Develops new research methodologies to study gene expression in the retina; authors publications detailing the experimental findings. Assists in the writing of grant proposals and the acquisition of support from outside agencies. No experience required in the job described but applicants will qualify with the following: Ph.D. in microbiology or molecular biology and 2 years of research experience with DNA sequencing, polymerase chain reaction, protein purification, expression vector construction, transfection methodologies, assays of reporter gene expression, histology and microscopy, and the cell biology of primary and explant and organ culture. At least two scholarly publications in the field. Experience can be gained concurrent with earning degree. Forty hours per week, 8 a.m. to 5 p.m., Monday to Friday; \$24,840 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **C. Bussard, JO# 1260208, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

RESEARCH ASSOCIATE/HEMATOLOGIC ONCOLOGY. For university in southwestern Ohio. Performing density cut on human blood and bone marrow samples. Use of monoclonal antibodies to study cell cycle kinetics of leukemias and solid tumors. Studying DNA damage and repair induced by chemotherapy using immunohistochemical techniques. Autoradiography on tissue samples containing radioisotopes. Studies involving proliferation and differentiation in neoplastic cells. Use of Feulgen reaction to quantitate the content of DNA in different types of cancer cells and correlating it with clinical and histopathological characteristics of the tumor. Supervision and training of the junior research assistants. Job requires M.B.B.S. or M.D. in medicine and 1 month of experience as research assistant. Knowledge of the following areas as evidenced by at least 1 month of research experience: (i) double labeling of human leukemic cells using two specific DNA probes (BrdU and 3HTdr); (ii) use of a computerized image analysis system (QUANTIMET 520) for calculating the ploidy of cancer cells; (iii) calculating the growth fraction of leukemia using monoclonal antibodies to P145 and 5C2; (iv) use of Data Analysis and Display System (DADS 560); and (v) immunohistochemically detecting single-stranded DNA damage induced by chemotherapy, utilizing antithymidine antibody (MoAb20B7). Forty hours per week; 8:00 a.m. to 5:00 p.m. Salary: \$25,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, JO#1099724, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.** *An Equal Opportunity/Affirmative Action Employer.*

AQUATIC BIOCHEMICAL TOXICOLOGY. Two positions: **RESEARCH ASSOCIATE** (Ph.D. required) and **RESEARCH TECHNICIAN** (B.S. required, M.D. preferred). Research activities include xenobiotic metabolism, glutathione metabolism, free radical biology, genotoxicology, and relevant applications as biomarkers, in aquatic field studies. Expertise in analytical chemistry and biochemistry, aquaculture, and/or field research sought. Send curriculum vitae and names of three references to: **Dr. Richard T. Di Giulio, Ecotoxicology Laboratory, School of Forestry and Environmental Studies, Duke University, Durham, NC 27706.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

Department of Clinical Pathology and Diagnostic Medicine, East Carolina University School of Medicine. **RESEARCH TECHNICIAN III.** The Department of Clinical Pathology and Diagnostic Medicine is seeking a research technician for the Molecular Immunopathology Laboratory. This person will be responsible for test development and research utilizing a wide variety of flow cytometric and cellular immunologic techniques. There will be close interaction with medical technologists and with other research technicians performing image analysis, gene cloning, and recombinant DNA techniques. The candidate should have a master's degree and/or experience in flow cytometric DNA analysis, immunophenotypic analysis, and cell function analysis. East Carolina University School of Medicine is located in a pleasant community near the coast of North Carolina and offers a competitive salary and excellent benefits. For consideration, please submit detailed résumé to: **Personnel Department, East Carolina University, Greenville, NC 27834.** *Affirmative Action/Equal Opportunity Employer.*

THE ROCKEFELLER FOUNDATION African Dissertation Internship Awards

Doctoral students from sub-Saharan Africa are invited to apply to The Rockefeller Foundation for dissertation research support. The program enables Ph.D. students enrolled in U.S. and Canadian universities to return to Africa for extensive field research in areas relevant to economic development or poverty alleviation. Priority is given to research topics in the fields of agriculture, health and life sciences, but other proposals are welcome.

Applicants are responsible for arranging affiliation with an African institution able to provide needed research support, such as laboratory facilities, access to study sites, and technical advice. The candidate's faculty advisor, the host institution in Africa, and the agency with primary responsibility for financing the student's graduate work must all send letters of endorsement.

Deadlines for applications are October 1, 1990 and March 1, 1991. Candidates should apply well in advance of the expected field work starting date.

For a full description of the competition and the application requirements, write to: African Dissertation Internship Awards, The Rockefeller Foundation, 1133 Avenue of the Americas, New York, NY 10036 USA.

U.S. DEPARTMENT OF ENERGY

POSTGRADUATE RESEARCH PROGRAMS

Toxicology	Engineering
Fossil Energy	Physical Sciences
Hazardous Wastes	Environmental Sciences
Artificial Intelligence	Life Sciences
Computer Sciences	Risk Analysis

- Research at national laboratories
- Stipends \$20,000 - \$41,000 depending on degree, program, research area
- Recent graduate degree
- U.S. citizens or PRAs eligible

Information and applications:



Postgraduate Research Programs
Science/Engineering Education Division
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117
(615) 576-3190

Ph.D. CLINICAL CHEMIST

Drug Safety Division

Wyeth-Ayerst Laboratories, a major division of a **Fortune 100 corporation**, has an immediate opening for a Ph.D. level Clinical Chemist to supervise a modern, well-equipped clinical laboratory at our Drug Safety testing facility in upstate New York.

Applicants for this position should possess previous experience with the Hematology Clinical Chemistry and Biochemistry of the common laboratory species, and with the adaptation of human testing procedures and as tools for the rapid interpretation of clinical results. The successful candidate will work on a cooperative basis with Ph.D. level Toxicologists, Pathologists and Pharmacologists, providing input regarding the significance of the clinical results and developing strategies to further elucidate the possible mechanism of drug toxicity.

In addition to an excellent starting salary, liberal benefits package and opportunities for professional growth, we offer a choice location between the foothills of the Adirondack Mountains and the shores of Lake Champlain; areas boasting 4-season recreational activities and leading NY and VT universities. To express interest, forward resume with salary requirements to: **Mr. Gary D. Wagoner, Wyeth-Ayerst Laboratories, 64 Maple Street, Rouses Point, NY 12979.**



NO AGENCIES PLEASE
Equal Opportunity Employer M/F/H/V

Post-Doctoral Research Position

HEMATOLOGY- ONCOLOGY

Thrombosis Research Center

Position immediately available for post-doctoral research fellow. Ph.D. or M.D. with experience in molecular and/or cell biology will participate in studies of adhesion proteins and receptors on platelets and vascular cells.

Send CV to: Roy L. Silverstein, M.D., Division of Hematology-Oncology, **CORNELL UNIVERSITY MEDICAL COLLEGE, 1300 York Avenue, New York, New York 10021.** An Equal Opportunity/Affirmative Action Employer.

**CORNELL
UNIVERSITY
MEDICAL
COLLEGE**



POSTDOCTORAL POSITION

Position available for an individual with a Ph.D. in cell biology, biochemistry, or physiology with experience in cell culture. The successful applicant will be involved in research into the molecular mechanisms through which physical forces, generated during cellular deformation, influence cellular biochemistry. Research will focus on the molecular structures involved in regulation of mechanically-sensitive adenylate cyclase and Na⁺/H⁺ antiporter activities during volume expansion and compression, as well as during cell spreading following extracellular matrix attachment.

Competitive salary and fringe benefits are available. Please send CV and three names or letters of reference to:

Dr. Peter A. Watson
Weis Center for Research
Geisinger Clinic
Danville, PA 17822

Equal Opportunity Employer M/F/H/V

Geisinger

POSITIONS OPEN

ASSOCIATE RESEARCH SCIENTIST. Position available to study biochemical basis for antiviral activity of compounds developed in our laboratory. Experience in enzymology, nucleic acid biochemistry, virology, and cell culture is desirable. Salary negotiable. Send résumé and three letters of reference to: **Dr. W. Prusoff, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.** An Equal Opportunity/Affirmative Action Employer.

Associate Professor of Medicine (**RESEARCH POSITION**). To be responsible for supervision of research fellows and graduate students involved in research of the biology of hepatitis B virus. Specific duties including: cloning of DNA and cDNA; in vitro expression of DNA and cDNA; molecular hybridization analyses (spot blot, Southern blot, Northern blot, and in situ hybridization), including radiolabeling of DNA, RNA, and oligonucleotides; polymerase chain reaction, DNA sequence analyses; isolation of propagation of mononuclear cells from human blood; transient and stable transfection of mammalian cells; and patient selection and patient care for immunotherapy of hepatocellular carcinoma and other malignancies. Candidate must possess M.D. in medicine together with 3 years in position offered or 3 years as a medical researcher involved in molecular biology of hepatitis B virus. Must also possess demonstrated expertise in the design and execution of animal experiments, including operative skills; demonstrated expertise in the detection of viral infections at the single cell level by in situ hybridization; demonstrated expertise in the evaluation of antiviral drugs (vitro and in vitro); knowledge of molecular hybridization techniques, cloning, sequencing, polymerase chain reaction, and transfection mammalian cells; knowledge of molecular biology, biochemistry, and hepatology. Salary: \$55,000 per year for 5-day, 40+-hour work week. Send résumés to: **Massachusetts Department of Employment and Training, Special Programs Department, 19 Staniford Street, Boston, MA 02114, Attention: Job Order #00694.** Affirmative Action/Equal Opportunity Employer.

Assistant Professor of Medicine (**RESEARCH POSITION**). To be responsible for classroom instruction, research, and supervision of research fellows and graduate students involved in production and characterization of monoclonal antibodies against tumor-associated antigens. Also responsible for supervising foreign scholars coming for studies relating to chronic hepatitis B viral infection and their role in the transformation of hepatocytes to malignant phenotype; directing research on immunotargeting of cancer with monoclonal antibodies conjugated to cytotoxic drugs, radioisotopes, and toxins; immunohistological analysis of cancer; and development of gene therapy of cancer. Candidate must possess M.D. and Ph.D. in medical science or cell biology together with 2 years in position offered or 2 years as a researcher. Must also possess demonstrated expertise in the molecular biology of hepatitis B infection including DNA cloning, sequencing, and transfection technique, experience in transgenic mice; demonstrated expertise in immunohistopathology of cancer including detailed knowledge of tumor pathology; demonstrated expertise in nuclear medicine especially related to radioimaging and radioimmunotherapy of gastrointestinal cancer and lung cancer including conjugation of monoclonal antibodies to drugs, radioisotope especially high energy beta emitter and toxins. Salary: \$40,000 per year for 5-day, 40+-hour work week. Send two (2) résumés to: **Massachusetts Department of Employment and Training, Special Programs Department, 19 Staniford Street, Boston, MA 02114, Attention: Job Order #00729.** Affirmative Action/Equal Opportunity Employer.

SITUATIONS WANTED

BIOCHEMIST. Ph.D. (1980). Experience; enzymology, enzyme immobilization and modification, reactor control, biomass utilization, natural products extraction, bioprocessing. Seeks research position. **Box 89, SCIENCE.**

MICROBIOLOGIST/MOLECULAR BIOLOGIST. M.Sc. Tissue culture, rDNA, protein gel electrophoresis. Experience in yeast genetics and retrovirology: 2 to 3 years. **Box 95, SCIENCE.**

M.D. Former medical director, major drug companies, 25 years. Seeks full- or part-time employment. Regulatory, writing, statistics, NDAs, GCP, GLP, etc. Telephone: 215-794-5581.

POSITIONS OPEN

RESEARCH SCIENTISTS (2). Rorer Central Research, a Division of Rhone-Poulenc Rorer, a worldwide ethical pharmaceutical company, has immediate openings for two research scientist positions to perform cancer research focusing on the investigation of tyrosine kinase structure/function relationship, biological control and function in cell growth control/somatic development, and tissue regeneration. Develop, track, and present results of experiments and international professional publications and seminars. Ph.D. in biochemistry plus 2 years of hands-on experience performing research incorporating protein chemistry, cell biology, molecular biology, and crystallography and computer programming relating to the field of cell growth control, oncogenes, receptor-ligand interactions, and receptor signaling; \$37,000 per year. Rorer offers competitive salaries, company-paid benefits, and excellent potential for professional recognition and advancement. Please submit résumé to: **Position #INS-AH1, Rorer Central Research, 640 Allendale Road, King of Prussia, PA 19406.** Equal Opportunity Employer, M/F.

VIROLOGIST

The Yerkes Regional Primate Research Center and Department of Pathology, Emory University, have an opening for a virologist with experience in retrovirus research. Candidates should have a Ph.D., D.V.M., M.D., or equivalent and should have sufficient research experience to demonstrate their ability to establish an independent research program in areas related to the pathogenesis of AIDS and related retroviruses in animal models. The successful applicant will also participate in ongoing clinical, immunological, and pathological studies with the simian immunodeficiency virus. Salary is negotiable and is commensurate with experience. The position is available immediately. Letters of application including curriculum vitae, a brief statement of research interests, and the names of three references, should be sent to: **Dr. Harold McClure, Associate Director, Yerkes Primate Research Center, Emory University, Atlanta, GA 30322.** Emory University is an Equal Opportunity/Affirmative Action Employer.

ANNOUNCEMENTS



Grant applications for starter grants for **CORONARY HEART DISEASE RESEARCH** will be accepted for 1 year with a limit of \$15,000 (renewable). The deadline date for submission of applications is 30 November 1990. Write to:

**American Health Assistance Foundation
Research Grants Department
15825 Shady Grove Road, Suite 140
Rockville, MD 20850**

ANNOUNCEMENT AND CALL FOR POSTER ABSTRACTS THE FRANK K. KELEMEN MEMORIAL SYMPOSIUM: THE MOLECULAR BASIS OF SIGNAL TRANSDUCTION

12 to 13 November 1990; Hyatt Cherry Hill, Cherry Hill, New Jersey.

Organized by the Coriell Institute of Medical Research, Camden, New Jersey, in honor of Dr. Stanley Cohen of Vanderbilt University. Other speakers include: Janice Buss, Tom Curran, Jackson Gibbs, Ed Harlow, David Livingston, Roger Perlmutter, Haruo Saito, Joseph Schlessinger, Richard Stanley, and George Todaro.

To receive conference registration and abstract submission information, please call or write to: **Dr. Subal Bishayee, Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103.** Telephone: 609-757-9749.

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ANNOUNCEMENTS



Grant applications for **NATIONAL GLAUCOMA RESEARCH** will be accepted for 1 year, \$25,000 maximum, renewable. The deadline date for submission of applications is 30 November 1990. Write to:

**American Health Assistance Foundation
Research Grants Department
15825 Shady Grove Road, Suite 140
Rockville, MD 20850**

FELLOWSHIPS

A limited number of postdoctoral and predoctoral fellowships are available from Sigma Delta Epsilon-Graduate Women in Science, Inc. Applications from women are particularly encouraged.

Fellowships are for \$1000 to \$4000.

A total of \$20,000 is available.

Deadline is 1 December 1990.

For additional information and application forms:

**Sigma Delta Epsilon-Graduate Women
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P.O. Box 4748
Ithaca, NY 14852**

WORKSHOP ON GENERAL POPULATION EXPOSURES TO GASOLINE

Sponsored by the American Petroleum Institute, U.S. Environmental Protection Agency, Motor Vehicle Manufacturers Association, Northeast States for Coordinated Air Use Management (NESCAUM), National Petroleum Refinery Association, Western States Petroleum Association, Health Effects Institute (HEI), and the Canadian Petroleum Products Institute (CPPI).

CALL FOR DATA CALL FOR PAPERS

There is increasing debate among public health officials about exposure to gasoline. A 2 1/2-day workshop is planned for 12 to 14 December 1990 in Annapolis, Maryland, to facilitate discussion among scientists, managers, and policymakers in the public and private sectors about general population exposures to gasoline or constituents thereof (excluding combustion products or smog). The workshop will highlight new data on gasoline exposures and examine new strategies for analyzing exposure. The product will be a compilation of peer-reviewed papers and an executive summary to inform regulatory decision-makers as they consider possible reduction strategies for gasoline exposures. We are seeking submissions of data (for incorporation into a background paper currently in preparation) or presentations of data on nonoccupational gasoline exposures. Please emphasize the database available.

Deadline for submission of abstracts (200 to 300 words) and/or data is 1 October 1990.

Registration is open; fee is \$150. To submit abstracts and/or data and to obtain further information about the workshop, contact: **Dr. Karen L. Hulebak, Environ International Corporation, 4350 North Fairfax Drive, Arlington, VA 22203.** Telephone: 703-516-2300. FAX: 703-516-2345.

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Postdoctoral Research Associate positions are available in protein crystallography, molecular virology, and immunology and offer a unique and highly productive opportunity.

Four positions are open in the following areas:

1. Analysis by X-ray crystallography of the structure of the virus and its reaction with antibodies and cell receptors. The Center has its own X-ray crystallography facility. Dr. J. Hogle, Scripps Clinic and Research Foundation, is collaborating in these studies.
2. Analysis of the structural basis of antigenic specificity of immunogenic peptides by nuclear magnetic resonance and circular dichroism. This work will be a collaboration with Professor W.A. Gibbons and Dr. P. Mascagni, University of London, England.
3. Study of the molecular basis of the interaction between the virus and cell receptors.
4. Study of the immune response to synthetic peptides and recombinant vaccines.

The Center is situated off the northeast tip of Long Island, New York. USDA ferry services to Orient Point, NY and Old Saybrook, CT offer a choice of living on Long Island or in Connecticut. Close collaborations are being developed with research institutions in the area, including: Yale and Tufts Universities, the University of Connecticut and the State University of New York at Stony Brook.

Appointments are for two or three years from December 1, 1990 (or by arrangement), and, based on qualifications, will be at the GS-11 (approximately \$30K/year) or GS-12 level (approximately \$36K/year). Successful candidates must have obtained a PhD or equivalent degree in a relevant discipline within the last 3 years. Individuals with experience in picornaviruses or protein crystallography are particularly encouraged to apply. Applicants should send a curriculum vitae marked 0N053 along with the names and addresses of three references to:

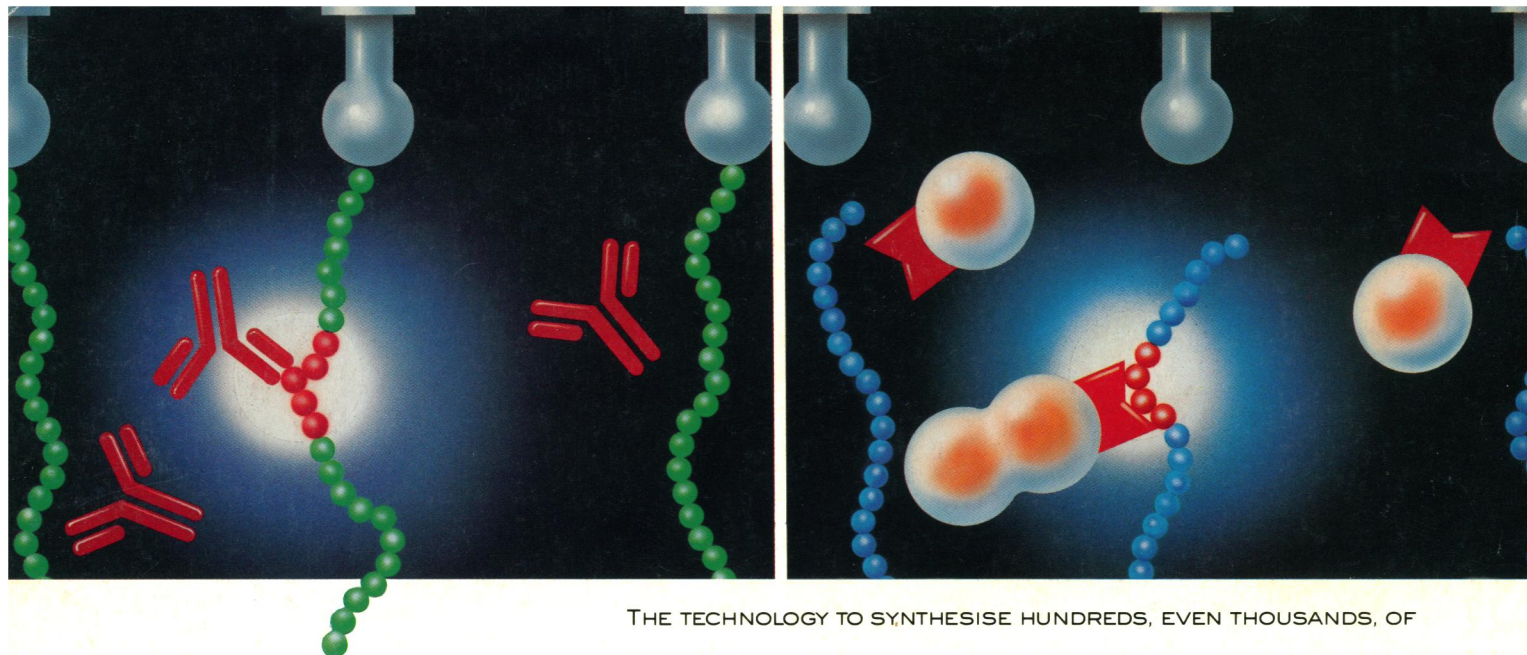
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USDA-ARS, Plum Island Animal Disease Center
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Applications must be received before November 1, 1990

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