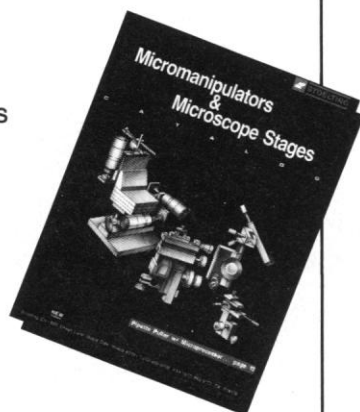


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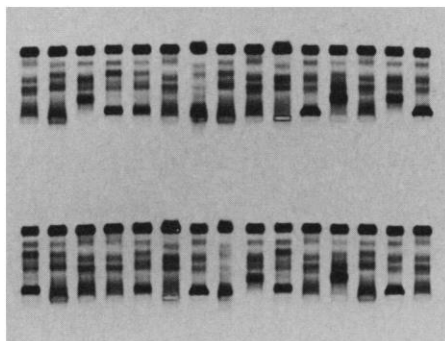
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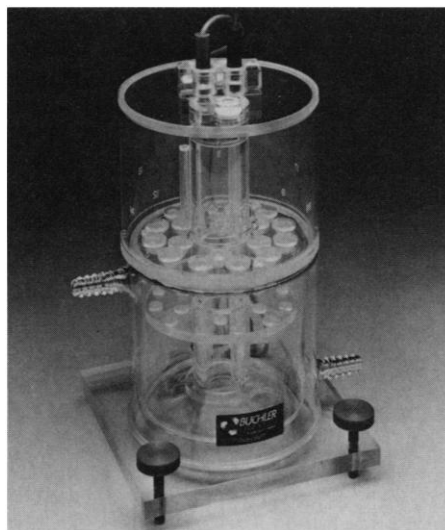
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Vertical Tube Gel Apparatus

The Polyanalyst vertical tube gel apparatus, with an 18-tube capacity, allows many variables to be tested simultaneously. The unit can be fitted with 3-mm tubes for



running the first dimension of most two-dimensional gel protocols. For fractionation, universal grommets can accept gel tubes from 5 mm to 8 mm and an optional lower buffer chamber can accommodate tubes up to 250 mm in length. The lower buffer reservoir is water-jacketed to provide cooling for labile samples or for isoelectric focusing in tubes. The design permits tubes to be filled and gels to be directly polymerized in the unit. Buchler Instruments. Circle 456.

PC Integrators for HPLC

Two new personal computer integrators for high-performance liquid chromatography (HPLC) control integration parameters and data collection, provide video strip-chart displays of collected data, and allow reanalysis. Both integrators can generate five different formatted reports, printing out reports and chromatograms while samples are being separated. Model 502 provides two channels of high-resolution data acquisition; the more sophisticated Model 804 provides four channels and other features. The integrators are IBM-AT compatible. Bio-Rad Laboratories. Circle 438.

Literature

NIST Standard Reference Materials Catalog (SP 260) lists 1100 materials available from the U.S. Commerce Department's National Institute of Standards and Technology (formerly the National Bureau of Standards). The first such catalog ever, the certified materials include nutrition and clinical health standards to calibrate instruments; materials certified for their chemical and physical properties such as ores, metals, glass, plastics, and food; and environmental standards. National Institute of Standards and Technology. Circle 478.

The *1990 Analytical Supplies Catalog and Chromatography Reference Guide* is a 256-page book with information on products including columns for gas and liquid chromatography, syringes, paper, chemical samples, and supplies for gas chromatography, high-performance liquid chromatography, gas chromatography/mass spectroscopy, and more. Hewlett-Packard. Circle 481.

Foxy 200 Expert Fraction Collector is an eight-page brochure that describes a collector for preparative high-performance liquid chromatography and process liquid chromatography. The unit features built-in peak detection, repetitive collection cycles, and menu-based input of collection parameters. Isco. Circle 486.

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.

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

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CLASSIFICATION: **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Fellowships, 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 x \$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.)

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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:

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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.

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POSITIONS OPEN

UNIVERSITY OF HARTFORD COLLEGE OF BASIC STUDIES

ASSISTANT PROFESSOR/GENERAL BIOLOGY. The College of Basic Studies (CBS) of the University of Hartford invites applications for a tenure-track faculty position in the Department of Mathematics and Science. Responsibilities will include teaching of multiple sections of a year-long introductory biology course for nonmajors, advising of students, and participating in college and university committees.

The successful candidate must demonstrate evidence of excellence in teaching, a commitment to undergraduate advising, and potential for professional development through research and publication. Interest in and ability to develop courses in scientific areas in addition to biology is also desirable. A doctoral degree is required for appointment to tenure-track positions. The ability to offer this position is dependent upon the availability of university funds.

CBS offers a structured 2-year liberal arts program leading to an Associate of Arts degree for students who have not reached their full potential in high school. It provides students the opportunity to develop the skills and educational background necessary to continue beyond the A.A. in more traditional baccalaureate programs.

The University of Hartford is an independent university, enrolling approximately 8000 students in over 100 undergraduate majors and over 50 graduate degree programs.

Please send a letter of application, curriculum vitae, three current letters of reference, and copies of all transcripts to: **Dr. Richard L. Roth, Chair, Science Search Committee, College of Basic Studies, University of Hartford, West Hartford, CT 06117.** Deadline for receipt of completed applications is 15 June 1990.

The University of Hartford is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages application from women and minorities.

Purdue University, **ASSISTANT PROFESSOR/PLANT PATHOLOGIST.** Tenure-track, 12-month, 70% research, 30% teaching. Research: develop an independent program on diseases of soybean. The specific field of research is open, but the successful candidate will be capable of a broad range of modern approaches to plant pathology. Teaching: contribute to instruction in the plant pathology program and supervise graduate student research. Closing date is 1 July 1990 or until a suitable candidate is found. Applicants must hold a Ph.D. in plant pathology or related areas, postdoctoral experience preferred. Send curriculum vitae, copies of publications, transcripts, the names of five references, and a statement of research and teaching goals to: **Dr. R. C. Coolbaugh, Botany and Plant Pathology, Lilly Hall, Purdue University, West Lafayette, IN 47907.** Telephone: 317-494-4615. *An Equal Opportunity/Affirmative Action Employer.*

BEHAVIORAL NEUROSCIENCE. One-year visiting faculty position beginning autumn of 1990 in the Department of Psychology to fill a temporary vacancy. Prefer researcher with interest in the physiology of learning and/or plasticity. Duties include teaching courses on the neural basis of behavior. Position subject to availability of funds. Send letter, curriculum vitae, and list of references to: **Irvin Sarason, Chair, Department of Psychology NI-25, University of Washington, Seattle, WA 98195.** Applications will be considered as received. *Affirmative Action/Equal Opportunity Employer.*

BIOLOGIST/ENVIRONMENTAL CHEMIST. The U.S. Geological Survey in Lakewood, Colorado, seeks a biologist/environmental chemist for investigation of carbon-isotope transfer among soil, water, air, vascular plants, and other biota. Knowledge of multidiscipline approaches to ecology, environmental chemistry, and hydrology is important. Experience in isolation of carbon transfer processes, gas chromatography, and ^{14}C counting is desirable. Candidates should have a Ph.D. or equivalent research experience in a related field. The appointment is for a 2-year term with the possibility of conversion to a permanent position. Salary is at the GS 11/12/13 level (\$29,891 to \$55,381) depending on the candidate's background. Please submit by 10 June 1990 curriculum vitae, three letters of reference, and a statement of research interests to: **Robert Striegl, U.S. Geological Survey, MS 413, Box 25046, Denver, CO 80225-0046.** *U.S. citizenship is required. U.S. Geological Survey is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

Virginia Polytechnic Institute and State University, Department of Fisheries and Wildlife Sciences, is accepting applications for a 12-month, tenure-track, research position in freshwater aquaculture at the **ASSISTANT PROFESSOR** level. The successful candidate is expected to develop a research program in aquaculture specializing in physiology and/or nutrition. *Women and minorities are encouraged to apply.* Closing date is 1 July 1990 or until suitable applicant is selected. Send letter of interest, résumé, transcripts, examples of publications, and names of three references to: **Larry A. Nielsen, Head, Department of Fisheries and Wildlife Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0321.** *Virginia Polytechnic Institute and State University is an Equal Opportunity/Affirmative Action Employer and hires only U.S. citizens or others authorized for employment in the United States.*

DIRECTOR OF ALZHEIMER'S CENTER

The Department of Psychiatry of the School of Medicine, University of California, San Francisco (UCSF), is seeking a psychiatrist as director for the Alzheimer's Center which is based at the Langley Porter Psychiatric Institute. The incumbent will provide leadership for the teaching, research, and clinical components of the center program, and will be responsible for coordination of all geriatric training within the Department of Psychiatry, with other UCSF departments and with programs in the community. The position will be in a state-funded salary line at the **ASSISTANT PROFESSOR** level and will be available no later than 1 July 1991. The ideal candidate would be a Board-certified or Board-eligible psychiatrist with an established record of clinical and/or laboratory research on Alzheimer's disease or related disorders, evidence of a commitment to excellence in teaching and clinical care, and demonstrated ability in administration. Eligibility for California licensure is required. Applications must be received by 1 September 1990. Please send résumé to: **Leonard S. Zegans, M.D., Search Committee Chair, UCSF Department of Psychiatry, 401 Parnassus Avenue, Box F, San Francisco, CA 94143-0984.** *UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

DIRECTOR OF PHARMACOLOGY

Duties will include: coordinating the efforts of a group of research scientists working on several projects relating to the development of neuroprotective drugs; reviewing the progress of these projects; interacting with drug development personnel to determine balance of efforts in drug discovery; and to be involved directly in conducting experiments to evaluate drug candidates and to uncover new targets for drug discovery. The director of pharmacology will also be responsible for preparing grant proposals, managing several budgets, and serving on the Corporate Operating Committee.

Special requirements include: A Ph.D. in physiology or pharmacology and at least 3 years of independent postdoctoral research in neuroscience including experience in directing the efforts of a multidisciplinary research group; broad experience of neurotransmitter function in both vertebrates and invertebrates; demonstrated expertise in synaptic transmission studies involving both inhibitory and excitatory neurotransmitters and pharmacological agents; experience with whole cell and single channel recording techniques and with methods used to study neuronal calcium homeostasis including microspectrofluorimetric techniques; project and budget management experience in a multidisciplinary neuroscience research group. Quality of research experience should be internationally recognized.

Position located in the Boston area. Salary: \$80,000 per annum; 40 hours per week. Send two résumés to:

Job Order # 00554
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Equal Opportunity Employer.

ENVIRONMENTAL RESTORATION. Faculty and college graduates (all levels) needed to design an integrated training plan for Army personnel involved in Defense Environmental Restoration Program (DERP). For information, contact: **DERP Faculty/Postgraduate Research, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117.** Telephone: 615-576-3456.

POSITIONS OPEN

DIRECTOR OFFICE OF ANIMAL CARE MANAGEMENT

Florida State University is seeking a director for the Office of Animal Care Management. This position reports to the vice president for research and is responsible for maintaining the highest standards in all aspects of animal care and use on campus. This individual will have administrative oversight of the laboratory animal resources unit, which consists of a staff of 13, headed by a D.V.M., which provides clinical care to all laboratory animals on campus. This individual will represent the university in all matters of animal care and use with state and federal officials, the campus, and the public, including community groups concerned with animal care and use.

Qualifications include a D.V.M., experience in laboratory animal medicine and familiarity with all regulations and laws governing animal care and use. Administrative experience in a research environment using animals is important. An ability to deal with diverse groups and a sensitivity to the public's perception of animal use are critical, as is a desire to engage in public education.

Florida State University is a public research institution with a total enrollment of about 28,000 students. Research faculty with whom the director would interact number about 30. Their research activities include studies in physiology, behavior, neuroscience, nutrition, and immunology. Starting date: fall term 1990.

Statement of interests, curriculum vitae, and the names of at least three references should be submitted before 30 June 1990 to: Dr. Lawrence G. Abele, Chair, Search Committee, Department of Biological Science B-142, Florida State University, Tallahassee, FL 32306-2043.

Florida State University is an Affirmative Action/Equal Opportunity Employer with preference given to veterans and spouses of veterans as provided in Chapter 295, Florida Statutes.

Opening for a **TERRESTRIAL ECOLOGIST** beginning 1 July 1990 to support the Ecological Program activities at Kennedy Space Center. Position requires M.S. in ecology, botany, geography, or related areas; B.S. with 3 to 5 years of experience may be considered. Experience or training in plant community ecology, wetlands ecology, or fire ecology is desired. Knowledge of GIS systems (ERDAS and/or ARC/INFO), quantitative skills, and writing ability will be advantageous.

Submit résumé to: **Personnel Office, The Bonetics Corporation, BIO-1, Kennedy Space Center, FL 32899** by the close of business 20 June 1990.

Equal Opportunity Employer.

Allegheny College. Tenure-track and visiting **JOINT APPOINTMENTS** in math or science departments and education as part of major effort to focus teacher preparation on elementary and secondary math and science education. Rank and salary competitive. Earned doctorate, preferably in math or science; strong record in teaching, research, and educational improvement programs. Permanent secondary certification needed for one position. Duties include teaching undergraduates and graduates, supervising field experiences, advising, and research. Send letter, résumé, and names of three references to: **Richard McDermot, Associate Dean of College, Allegheny College, Meadville, PA 16335**. Write or call **814-332-3393** for more information. Positions available now; review begins 1 June 1990. *Equal Opportunity Employer.*

IMMUNOLOGIST/ ASSOCIATE RESEARCH SCIENTIST

The Surgical Immunology Research Laboratory at the West Haven Veterans Administration (VA) Medical Center is looking for a Ph.D. **DIRECTOR** to oversee one to three surgical resident trainees and participate in studies of lymphocyte signal transduction, neuroendocrine mediators of immune function, and the effect of immunosuppressives on second messengers and activation events. A permanent salary line from Bridgeport Hospital funds this geographic full-time position at West Haven, 5 minutes by shuttle bus to the Yale main campus. *Bridgeport Hospital, Yale University, and the West Haven VA Medical Center are all Equal Opportunity Employers and applications from women and minorities are encouraged.* Send curriculum vitae to: **Marvin A. McMillen, M.D., Director, Surgical Intensive Care Unit, West Haven VA Medical Center, West Spring Street, West Haven, CT 06516**.

POSITIONS OPEN

FACULTY APPOINTMENT AT HARVARD MEDICAL SCHOOL INSTRUCTOR LEVEL

Opening is for a molecular biologist/biochemist with two or more years of postdoctoral experience and an interest in basic cancer research. The major research focus is on induction of tumors in the mouse by polyoma virus, using approaches of recombinant DNA, protein biochemistry, and pathogenesis. Interested candidates should send curriculum vitae and three references to: **Dr. Thomas L. Benjamin, Department of Pathology, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115**. *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

FACULTY POSITIONS

The Department of Microbiology and Immunology, East Carolina University School of Medicine, invites applications for two tenure-track positions at **ASSISTANT OR ASSOCIATE PROFESSOR** levels. Applicants must hold a Ph.D. or equivalent degree and have at least 2 years of postdoctoral research training. Associate professor candidates must have an established, funded research program. Strong preference will be given to candidates having interest, experience, and skills in the areas of molecular virology and eukaryotic molecular genetics. Successful candidates will develop/maintain productive independent research programs and participate in the teaching of medical and graduate students. Salaries and research start-up support are nationally competitive. Submit curriculum vitae, description of research interests, and names of three references to: **Paul V. Phibbs, Chairman, Department of Microbiology and Immunology, School of Medicine, East Carolina University, Greenville, NC 27858-4354**.

An Equal Opportunity/Affirmative Action Employer. Federal Law requires proper documentation of identity and employability at the time of employment. It is required that this documentation be included with your application.

MOLECULAR BIOLOGIST. Conduct research to isolate genomic DNA clones and characterize the promoters of human dopamine and muscarinic receptor in cell lines and transgenic mice (including the creation of transgenic mice); conduct related scientific research in molecular biology. Must have M.S. degree in biochemistry and 3 years as molecular biologist or 3 years of research experience with characterization of genes in transgenic mice. Must have expertise in creation of transgenic mice. Forty hours per week, 9:00 a.m. to 5:00 p.m.; \$40,000 per year. Send résumé with copy of ad to: **DEED, 1100 North Eutaw Street, Room #212, Baltimore, MD 21201, J.O. #8944610**. *Proof of legal right to work in the United States required.*

MOLECULAR EVOLUTIONIST SMITHSONIAN INSTITUTION

The National Museum of Natural History, Smithsonian Institution, is seeking a senior scientist specializing in theoretical or empirical analyses of molecular genetic data for the study of systematics and evolution. We seek a scientist with broad knowledge and experience ranging from population genetics theory to phylogenetic inference. This position will carry a joint appointment in the newly established Laboratory of Molecular Systematics and one of the following departments: botany, invertebrate zoology, vertebrate zoology, entomology, anthropology, or paleobiology. The duties of the incumbent are to develop an independent research program, maintain strong ties to the adjunct department, and interact with other scientists and staff of the laboratory to promote an atmosphere of excellence. Technical assistance and research support are provided. Preferred applicants will have a Ph.D., experience at the tenured faculty level or its equivalent, and an outstanding record of research and publication.

The laboratory is located at the Smithsonian's Museum Support Center in Suitland, Maryland. Salary and grade level will be commensurate with experience and professional accomplishments. Applications should be received by 30 June 1990. *U.S. citizenship required.* Send curriculum vitae, federal application form (SF-171), selected publications, and names, addresses, and telephone numbers of three references to: **Office of Personnel Administration (Attention: Mariann Horejsi, MPA 90-1098), Smithsonian Institution, Washington, DC 20560**. For more information, contact: **Michael J. Braun, Director of the Laboratory, telephone: 301-238-3444**. *The Smithsonian Institution is an Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT MATERIALS SCIENTIST

Ph.D. in materials science. Two years of experience as a research metallurgist. Education and/or training and experience should include high temperature corrosion, the principles and operation of research equipment required to carry out the work on assigned projects, including specimen preparation techniques, various types of optical and electron beam instruments for material characterization, and special instrumentation to characterize the environments in which the corrosion/mechanical tests are performed. Individuals will contribute to the identification and evaluation of materials problems in coal gasification and coal combustion processes. Conduct experimental research to determine the effect of gaseous environments on the corrosion and mechanical behavior of materials used in the construction of major components in coal gasification and advanced coal combustion systems. Research will involve evaluations of the effect of critical material (alloy composition and microstructure) and environmental parameters (gas composition, thermodynamic activity of O₂, S₂, CO/CO₂, H₂/H₂O, temperature, and time) on the kinetics and mechanisms of corrosion of alloys in multicomponent gas mixtures under simulated process conditions. Correlations of the corrosion kinetics with alloy/scale and gas compositions, and the mechanical and defect-transport properties of the corrosion-product scales will be developed.

Salary: \$3900 per month; 40 hours per week, 8:30 a.m. to 5:00 p.m. Send résumé to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605**. Attention: **C. Donegan, Reference #1259-D**. *An employer-paid ad.*

LUPIN LABORATORIES LIMITED, INDIA

Lupin Laboratories Limited, a dynamic and recognized leader engaged in research, development, manufacture, and marketing of health care products, is recruiting innovative and dedicated scientists for their newly established Bio-Tech Research Centre at Mandideep in the Bhopal area in Madhya Pradesh for the following positions:

MOLECULAR BIOLOGIST: Ph.D. in molecular biology with a minimum of 5 years of academic or industrial experience in gene cloning and expression in bacterial and eukaryotic systems, genetic engineering of antibodies, and protein hormones.

PROTEIN CHEMIST/IMMUNOCHEMIST: Ph.D. in immunology or biochemistry with a minimum of 5 years of academic or industrial experience in purification and characterization of proteins, recombinant proteins, and antibodies using a range of immunologic methodologies including RIA.

BIOANALYST: Ph.D. in biological sciences with a minimum of 5 years of academic or industrial experience of using bioassays and immunoassays for various protein and other hormones.

Lupin offers an exciting work environment fertile for career growth and development and an excellent salary and benefit package. Indian nationals with established track record in scientific accomplishment and leadership responsibilities planning to return to India in near future may submit their résumé for prompt and confidential consideration to: **Personnel Manager, Lupin Laboratories Limited, 193, Shakti Nagar, Habibganj, Bhopal 462 024 (M.P.), India**.

PEPTIDE/PROTEIN CHEMISTS

Positions open for scientists and research associates at all educational levels (B.S., M.S., Ph.D.) with experience in peptide/protein/organic chemistry and peptide instruments (synthesizer, sequencer, amino acid analyzer, and/or HPLC). Please send résumé to: **Protein Chemistry Department, Diagnostic Products Corporation, 5700 West 96th Street, Los Angeles, CA 90045**.

PHARMACOLOGIST/PHYSIOLOGIST. Monsanto Company is expanding exploratory pharmaceutical research and we are seeking a pharmacologist/physiologist. This position requires a Ph.D. in pharmacology or physiology with experience in isolated smooth muscle, cellular, and whole-animal assay techniques. A working understanding of biochemistry and cell and molecular biology will facilitate collaborative research. This is an excellent opportunity to apply your skills to new discoveries and challenges. Please send your curriculum vitae and names of three references to: **Philip Needleman, Ph.D., Vice President, Research and Development, Monsanto Company, AA4-PN, 700 Chesterfield Village Parkway, St. Louis, MO 63198**. *Equal Opportunity Employer, M/F/H/V.*



Vice Chancellor, Health Affairs and Chief Executive Officer Duke Hospital

Duke University invites applications for the position of Vice Chancellor—Health Affairs and Chief Executive Officer, Duke Hospital. This position reports directly to the Chancellor for Health Affairs and is a key member of the senior management team which decides and directs policy for the Medical Center. This individual will provide the leadership for all aspects of Duke Hospital Operations to accomplish institutional objectives and to deliver high-quality, competitive health care services within a leading academic health science center.

This individual will be responsible for developing and updating strategic and long-range health care delivery plans which support the institution's philosophy and mission. In addition, this Vice Chancellor will oversee compliance with regulations governing health care delivery and requirements of accrediting bodies; management of clinical services and operations, programs and physical plant; and liaison with medical staff to ensure cost-efficient, high-quality care.

Candidates for this position should have a proven record of successful performance as Chief Executive or Chief Operating Officer of a university-owned or closely affiliated teaching hospital. Candidates should have a graduate degree in Hospital or Health Administration, Medicine or Business.

Please forward resumes to: Vice President, Health Affairs Search, Duke University, P.O. Box 40001, Durham, NC 27706.

Vice Chancellor for Academic Affairs

Duke University Medical Center invites applications for the position of Vice Chancellor for Academic Affairs. This position reports directly to the Chancellor for Health Affairs and is a key member of the senior management team which decides and directs policy for the Medical Center.

This individual will have the overall management responsibility for Duke University Medical Center's graduate education and sponsored research programs, and faculty affairs. Responsibilities include coordinating the development and implementation of biomedical research and education policy, participation in the review and development of basic science programs (including budgetary and space recommendations), research resource planning and management, relationships with industry, and the coordination of technology transfer developments in conjunction with University policy. The faculty affairs portfolio includes the coordination of the review process for faculty promotions and appointment. Applicants should have a doctorate degree in the sciences (M.D., Ph.D. or equivalent), and a strong background in biomedical research and research administration.

Please forward resumes to: Vice Chancellor for Academic Affairs Search, Duke University, P.O. Box 40001, Durham, NC 27706.

Duke University
A Universe of Opportunity

Duke University is an Equal Opportunity/
Affirmative Action Employer.

Public Health Service National Institutes of Health National Cancer Institute

A Senior Executive Service Vacancy

ASSOCIATE DIRECTOR, EXTRAMURAL RESEARCH PROGRAM

Division of Cancer Biology, Diagnosis, and Centers

Location: Rockville, Maryland

The Associate Director, Extramural Research Program, will be responsible for the management of a program of national and international scope which supports basic and developmental research on the biology and diagnosis of cancer. The Extramural Research Program consists of three major program areas, Tumor Immunology, Tumor Biology, and Cancer Diagnosis, each of which is supervised by a Branch Chief. The Associate Director provides leadership and direction to these program areas which together administer approximately 1250 active grants, contracts, and cooperative agreements at a total funded level of approximately \$256 million. The Extramural Research Program is supported by a staff of 19.

This is a Civil Service position in the Senior Executive Service (SES) with an annual salary compensation between ES-1 through ES-4 (currently \$71,200 to \$79,200). In addition, physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per year. (Applicants alternatively may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The individual selected, if not presently in SES, must serve a one-year probationary period.

Applicants must meet the minimum educational requirements for one of the following occupational series: Health Scientist Administrator GS-601; Medical Officer GS-602; Biologist GS-401; Microbiologist GS-403; or Chemist GS-1320. Applicants must further meet established mandatory professional/technical and managerial/executive requirements. Applicants will be further evaluated on the degree to which they possess additional desirable qualifications in the areas of professional/technical qualifications, managerial/executive qualifications, scientific reputation/peer recognition, training and education, and honors and awards. A copy of the requirements may be obtained by contacting Ms. Sharon Quinn in the Personnel Management Branch, NCI, at (301) 496-8182.

Applications for Federal Employment (SF-171) are to be sent to the individual and address listed below. Current curriculum vitae and bibliography should accompany all applications for entrance into the SES. Resumes are not acceptable applications for entrance into the SES. Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the address below.

Ms. Sharon Quinn
Personnel Management Branch
National Cancer Institute
Building 31, Room 3A16
9000 Rockville Pike
Bethesda, MD 20892



Applications must be received by July 20, 1990.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.



THE CHINESE UNIVERSITY OF HONG KONG

invites applications for

Senior Lectureship in Physiology (Ref. no. 20/509/2/90)

The Department of Physiology

The Department teaches a two-year Physiology Course to pre-clinical students and an intercalated degree course for Medical Students and participates in a Science Course on Human Biology. The Department is currently actively engaged in research including: endocrine and reproductive physiology, epithelial transport mechanisms, gastro-intestinal physiology and nutrition, muscle physiology, renal and acid-base physiology as well as somato-sensory physiology.

The Senior Lectureship

Applicants are expected to have a medical degree or a Ph.D with several years of research and teaching experience in Physiology or a related field. The appointee, to assume duty in September 1990 or as soon as possible thereafter, is expected to have teaching experience covering areas of physiology also outside his research field.

Annual Salary (currently under review)

HK\$363,300-488,040 by 8 increments

(approx. exchange rate :US\$1 = HK\$7.8; £1 = HK\$12.8)

Conditions of Service

The University offers a competitive remuneration package. Starting salary will be commensurate with qualifications and experience. For superannuable appointment, benefits include annual leave and long leave with full-pay, contributory superannuation scheme (University 15%, appointee 5%), medical care, education allowances for children, and housing benefit for eligible appointee (with appointee contributing 7.5% of salary towards rental). Appointment may also be made on fixed term contract which carries equivalent benefits including a contract-end gratuity (15% of basic salary). Fringe benefits will be packaged flexibly including cash payment options subject to mutual agreement.

Application Procedure

Send full resume in duplicate, giving full particulars as well as names and addresses of 3 referees, together with copies of certificates/diplomas, testimonials and recent publications (if any) to the Personnel Section, the Chinese University of Hong Kong, Shatin, Hong Kong before **June 30, 1990**. Please quote the reference number and mark "Recruitment" on cover.



**Garvan Institute
Of Medical Research**
St. Vincent's Hospital,
Sydney, Australia

The Garvan Institute is the leading medical research institute in New South Wales and is affiliated with St. Vincent's Hospital and the University of NSW. The Institute is one of five recipients of block funding from the National Health and Medical Research Council and has a staff of 120 structured as 4 integrated divisions.

EXECUTIVE DIRECTOR/ PROFESSOR

The Board of the Institute invites applications from persons wishing to be considered for appointment as Executive Director of the Institute. The successful applicant will be appointed to an appropriate Chair in the Faculty of Medicine at the University of NSW and to the medical or scientific staff of St. Vincent's Hospital.

The new director should be an internationally recognised scientist and will be expected to lead the Institute by personal research, developing strategies for future development and by promoting the interests of the Institute in the scientific and public domains.

Further information may be obtained by contacting the Institute Secretary. Enquiries should be directed to the Chairman of the Board, Mr. Charles Curran, phone 61 2 257 0541.

Applications in writing, together with the names and addresses of at least three referees, should be forwarded by 25th July 1990 to:

THE SECRETARY
GARVAN INSTITUTE OF MEDICAL RESEARCH
ST. VINCENT'S HOSPITAL,
DARLINGHURST, NSW 2010 AUSTRALIA
PHONE: 61 2 361 2050 FAX: 61 2 332 4876

PhD Molecular Genetics/ Plant Genome Research

Du Pont's Central Research and Development Department is seeking an experienced PhD/ Geneticist for its Plant Science Research Section

The individual should be experienced in the techniques and approaches of molecular genetics to identify and clone genes that are known only by their mutant phenotype. The successful candidate must be capable of leading research projects in *Arabidopsis thaliana* molecular genetics and engaging in intramural and extramural collaborative research. Candidates with strong backgrounds in the molecular genetics of other model systems (i.e. *Drosophila*, *C. elegans*, yeast) and who are willing to adopt *Arabidopsis* as their system of choice are also encouraged to apply.

At Du Pont you'll find a stimulating scientific environment in a modern research facility located near Wilmington, DE. Our mid-Atlantic location offers a wide range of academic, cultural and recreational activities. We provide excellent compensation benefits, and relocation assistance. Qualified candidates should send a curriculum vitae with three letters of reference to Employee Relations Department, Room PSS-0012, Du Pont Company, Wilmington, DE 19898.



An Equal Opportunity Employer

MECHANICAL ENGINEER

Hope College invites applications for a tenure track position in Mechanical Engineering beginning in August 1990. Mechanical engineering is taught within the Physics Department leading to a degree in Engineering Physics. The duties of the position include: Teaching lower and upper division undergraduate courses; Supervision of engineering internships in local industries; Development of a research program which will include undergraduates. The courses include computer techniques, and candidates should be familiar with CAE and finite element calculations. Currently the department uses the CAE package I-DEAS and the finite element package NASTRAN on its VAXcluster. The applicant should have a PhD in Mechanical Engineering or a closely related field. Hope College is a co-educational, residential liberal arts college affiliated with the Reformed Church in America. The College has a long tradition of academic excellence in undergraduate science education with a high level of undergraduate research. Most students from Hope with the Engineering Physics degree go on to graduate school in Engineering. Holland Michigan is a community of about 50,000 located on the shores of Lake Michigan. The position is available beginning August 10, 1990, but is negotiable for any time through August 15, 1991. Applications will be received until the position is filled. Applications, including a résumé, names of three references, undergraduate and graduate transcripts, and a brief statement of how the applicant would use undergraduates in research should be sent to:

Dr. Peter L. Jollivet, Chm.
Department of Physics
Hope College
Holland, Mich. 49423

Hope College complies with federal and state requirements for non-discrimination in employment. Applications are encouraged from women and minority persons.

MOLECULAR BIOLOGIST

Merck Sharp and Dohme Research Laboratories is currently seeking a Molecular Biologist to join the department of Microbial Chemotherapeutics and Molecular Genetics. The preferred candidate will have a B.A./M.S. or equivalent degree in molecular biology and/or yeast molecular genetics. A knowledge of biochemistry will be useful. The projects will include the study of transcriptional factors in yeast. Merck Sharp and Dohme Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent.

Interested candidates should submit their resume with three letters of reference and salary requirements to: Ms. Dolores L. Barefield, Merck and Co., Inc., P.O. Box 2000, Rahway, NJ 07065. An equal opportunity/affirmative action employer, m/f/v/h.



Merck & Co., Inc.

The CNS program of Multinational Pharmaceutical Company has an immediate opening for a

MEDICAL PRODUCT LEADER

The program is involved in worldwide development of drugs in the fields of movement disorders, schizophrenia, depression and 5HT₃ antagonists, and is in phase of active expansion. The ideal candidate is a MD, board or certified or BE in Neurology or Psychiatry or with previous experience in clinical neuropharmacology.

Primary resident must be in Milan with frequent travelling.

Salary negotiable commensurate to experience.

Opportunity for leadership of a worldwide multinational team.

Send CV **evidenced the Ref. A-2527 on the envelope to:**

SINTEX S.r.l. — Via Frua 24 — 20146 MILANO — Italy

Neuroscientists

Pharmaceutical Research

Parke-Davis Pharmaceutical Research Division has immediate openings for Neuroscientists in the Pharmacology department. The successful applicants will join an experienced and interactive team of dedicated scientists in the area of cerebrovascular diseases.

Neuroscientist: Cerebrovascular Diseases

The candidates should have a strong background in neurochemistry and an interest in ischemic brain injury. Additional consideration will be given to those applicants with demonstrated expertise in the study of ion channels in mammalian nerve cell membranes. The successful applicant will direct a biochemically-oriented laboratory and contribute to a team-based approach to drug discovery. In addition he/she will be encouraged to publish and present research findings regularly. Requirements include an M.D. and/or Ph.D. or equivalent and postdoctoral research experience.

Postdoctoral Position: Neuroscientist (Fellowship T)

Immediate opening for a Neuroscientist interested in postdoctoral research training in the pathophysiology of hypoxic/ischemic brain injury. Projects ongoing in the laboratory of Dr. F.W. Marcoux include investigations of hypoxic neuronal injury in cell culture, including the role of calcium and excitatory amino acids, and hemodynamic and neuropathological study of ischemic brain insults in-vivo. Requirements include an M.D. and/or Ph.D. or equivalent.

Interested individuals should send their curriculum vitae to Mr. Bill Burmeister, PARKE-DAVIS, Pharmaceutical Research, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"

"Equal Opportunity In Action"



PARKE-DAVIS

A DIVISION OF **WARNER LAMBERT**

TOXICOLOGIST

The Research Division of Rohm and Haas Company, a specialty chemicals manufacturer with global operations, has an immediate opening for a Toxicologist in its Biochemical Toxicology Laboratory. This position is located at our Corporate Research Center in Spring House, PA — twenty miles north of center-city Philadelphia.

We are looking for a scientist to design, supervise, and conduct a variety of mechanistic toxicology studies closely linked to physiologically based pharmacokinetic modeling and risk assessment. The mechanistic studies will include pharmacokinetic and metabolic studies, as well as a variety of associated *in vitro* biochemical assays.

Candidates must have a Ph.D. degree in toxicology, pharmacology, biochemistry, or a related discipline. Relevant postdoctoral or professional experience is also required. The position requires demonstrated expertise with computers, excellent speaking and writing skills, and toxicological abilities sufficient to conduct competent risk assessments.

Rohm and Haas offers a highly competitive salary and benefits program, including relocation assistance. We invest heavily in research and in resources to develop our scientific staff. Candidates must be legally entitled to hold regular employment in the U.S. For consideration, please forward your resume or C.V., including publication list and references, to:

Corporate Staffing #1690



An Equal Opportunity Employer M/F

Associate Scientist/Scientist

Protein Analysis/Characterization

Genentech, Inc., a leader in the field of biotechnology, is seeking an individual to make innovative and original contributions performing protein analysis/characterization in the area of protein disposition.

You should be well equipped to characterize protein pharmaceuticals in biological matrices. In collaboration with other Scientists, you will define the disposition of protein drugs as a member of the Metabolism group.

We require a Ph.D. or equivalent experience in Biochemistry, Protein Chemistry or Analytical Chemistry. Additionally, you must have extensive experience in the isolation, purification and characterization of proteins. Hands-on experience with HPLC, electrophoresis and radiolabeling proteins is crucial; familiarity with immunoassays and bioassays is desirable.

Genentech, Inc. offers an excellent salary and benefits package and believes strongly in personal growth and advancement. For immediate consideration, please send your resume to Genentech, Inc., Human Resources Dept. NS-S, 460 Point San Bruno Blvd., South San Francisco, CA 94060. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

Genentech, Inc.
Genentech, Inc.
Genentech, Inc.
Genentech, Inc.
Genentech, Inc.

Research Scientist - Immunopathology

Parke-Davis Pharmaceutical Research Division, a Warner-Lambert Company, has an immediate opening for a Staff Scientist in the Immunopathology section. The successful candidate will join an experienced and interactive team of dedicated scientists working in the area of Immunopathology.

Research Scientist - Anti-Inflammatory Research

The successful applicant will join a multidisciplinary team dedicated to the discovery of novel anti-inflammatory agents. The selected candidate will apply a background in molecular biology and biochemistry to an investigation of leukocyte-endothelial cell interactions. A Ph.D. in biochemistry, cell biology or related field with at least 2 years of post-doctoral research is required. (Job #90008)

The Parke-Davis Research Division is located in Ann Arbor, Michigan adjacent to the University of Michigan campus. Our scientific staff enjoys excellent compensation and benefits, a modern laboratory work setting and an exceptional living environment with excellent schools, diverse social activities and cultural activities associated with a major university.

Interested, qualified applicants should send their resume indicating the correspondence job #, list of references and salary requirements in confidence to Mr. B. Burmeister, Human Resources Representative, Parke-Davis, 2800 Plymouth Road, Ann Arbor, Michigan 48105. "Smoke-Free Work Environment"

"Equal Opportunity In Action"



PARKE-DAVIS

A DIVISION OF **WARNER
LAMBERT**

POSITIONS OPEN

MARINE BIOLOGIST. With background in marine birds and/or mammals. Moss Landing Marine Laboratories (MLML) is seeking a tenure-track, probationary appointment at the **ASSISTANT OR ASSOCIATE PROFESSOR** level to provide quality undergraduate and graduate instruction, and to pursue a vigorous research program on some aspect of sea birds and/or marine mammals. Teaching responsibilities include courses in marine birds and mammals and statistics. A Ph.D. is required. The salary range for assistant professor level is \$30,276 to \$41,844; associate professor level is \$38,112 to \$52,896/academic year. The position may be filled as early as spring of 1991.

Moss Landing Marine Laboratories is located on Monterey Bay, an area noted for abundant, diverse populations of sea birds and marine mammals. The Laboratories are operated by a consortium of California State University campuses including Fresno, Hayward, Sacramento, San Francisco, San Jose, and Stanislaus.

Send curriculum vitae, representative reprints and the names of three referees by 1 September 1990 to: **Dr. John H. Martin, Director, MLML, P.O. Box 450, Moss Landing, CA 95039.**

The University is especially interested in hiring faculty members who are aware and sensitive to the educational goals and requirements of an ethnically and culturally diverse population. An Equal Opportunity/Affirmative Action/Title IX Employer.

MOLECULAR BACTERIOLOGY

The Department of Microbiology, University of Virginia School of Medicine, invites applications for a tenure-track faculty position at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. We are seeking candidates with strong training in molecular biology, molecular genetics, and/or protein biochemistry, and with research interests in molecular analyses of prokaryotic systems. We especially encourage applicants pursuing molecular biological studies of pathogenic bacteria. Requirements include a Ph.D. or equivalent degree and postdoctoral experience. The successful candidate is expected to develop an active, independent research program and to participate in limited teaching of graduate and medical students. This position is available for immediate occupancy. Priority will be given to applications received before 1 September 1990.

Candidates should submit curriculum vitae, summary of research plans, and list of three or four referees to: **Robert J. Kadner, Microbiology Search Committee, Department of Microbiology, Box 441/School of Medicine, University of Virginia, Charlottesville, VA 22908.** *The University of Virginia is an Equal Opportunity/Affirmative Action Educator and Employer.*

HMRI

HUNTINGTON MEDICAL RESEARCH INSTITUTES STROKE RESEARCH PROGRAM

Effective early intervention is the goal of a new stroke program being organized at HMRI. Work in the Advanced Neurosurgery Laboratory will be augmented by collaboration with researchers in HMRI's MR spectroscopy, MRI, cardiology, cell biology, and neurobiology programs.

The following appointments are planned: **PHYSIOLOGIST, POSTDOCTORAL FELLOW** (neurosurgery and/or neurology), **RESEARCH ASSOCIATE**, and **LABORATORY TECHNICIAN**. Senior scientists with established, independently funded, stroke-related research projects will also be considered.

Interested applicants should send résumés and three letters of recommendation to: **C. Hunter Shelden, M.D., Project Stroke, HMRI, 734 Fairmount Avenue, Pasadena, CA 91105.**

POSTDOCTORALS IN HUMAN BEHAVIORAL GENETICS AND NEUROGENETICS. M.D. or Ph.D. Emphasis on gene mapping, twin studies, quantitative genetic analysis, psychophysiology, or membrane receptors. Funded by NIMH and NIA. Applications reviewed as received until positions filled. Send curriculum vitae and arrange three letters of reference to be sent to: **V. Elving Anderson, University of Minnesota, 400 Church Street, S.E., Minneapolis, MN 55455.** *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE

A postdoctoral position is available immediately to study mechanisms of signal transduction and motility activation in spermatozoa. Current focus is on structure and function of egg-peptide receptors in spermatozoa and associated proteins utilizing immunochemical, biochemical and recombinant DNA approaches [see *PNAS* 86, 2128 (1989)]. Experience in standard recombinant DNA techniques such as gene cloning, hybridization, and sequencing is necessary. Experience in mutagenesis and expression systems is useful. Send curriculum vitae, statement of research experience, and names and telephone numbers of three references to: **Dr. Lawrence J. Dangott, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545.**

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

POSTDOCTORAL POSITION. Available immediately to develop new methods of gene therapy. See *Science* 247, 1465 (1990). Send curriculum vitae and letter of interest to: **Jon A. Wolff, M.D., Departments of Pediatrics and Genetics, University of Wisconsin, Waisman Center, 1500 Highland Avenue, Madison, WI 53705.** *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

TOXICOLOGY POSTDOCTORAL POSITION

Rorer Central Research, a division of Rorer, Inc., a worldwide ethical pharmaceutical company, has an immediate opening in the Biochemical Toxicology Laboratory, Drug Safety Division.

A postdoctoral position is available to investigate xenobiotic-induced peroxisome proliferation in cell culture and in vivo. Studies will be performed to evaluate structure-activity relationships and induction mechanisms by novel therapeutic agents. A Ph.D. in toxicology, pharmacology, or related fields preferred.

Rorer offers competitive salaries, company-paid benefits, and excellent potential for professional recognition and advancement. Please submit résumé to: **Human Resources Department, Attention: 90R-065, Rorer Central Research, 640 Allendale Road, King of Prussia, PA 19406.** *Equal Opportunity Employer, M/F.*

POSTDOCTORAL POSITIONS ON BEHAVIORAL NEUROSCIENCE TRAINING GRANT. Available immediately in Biopsychology Division and Neuroscience Program at the University of Illinois at Urbana-Champaign. Laboratories include those of Michael Gabriel (electrophysiology of learning), Martha Gillette (neurophysiology of circadian rhythms), Rhanor Gillette (motor patterning), William Greenough (CNS plasticity), Janice Juraska (sex differences in brain and behavior development), Victor Ramirez (regulatory endocrinology), Edward Roy (neuroendocrinology and behavior), Michael Salmon (sensory patterning), and Evelyn Satinoff (sleep, thermoregulation, and circadian rhythms). Applicants must be citizens or noncitizen nationals of the United States. Stipend: \$17,000 to \$26,000. Send curriculum vitae and three letters of recommendation to: **Dr. Evelyn Satinoff, Department of Psychology, University of Illinois, 603 East Daniel Street, Champaign, IL 61820.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION MOLECULAR BIOLOGY

MRC GROUP IN MEMBRANE BIOLOGY UNIVERSITY OF TORONTO

Postdoctoral position beginning 1 July 1990 for 1 year, renewable for one further year, to work on molecular characterization of epithelial membrane transport proteins and investigation of mechanisms of transport function and regulation. Candidates must be within 1 year of graduation and have a background in protein chemistry with relevant experience in molecular biological techniques such as cloning, expression systems, and site-directed mutagenesis.

Stipend: \$21,480 to \$24,340 depending on experience. The Ph.D. should be in biochemistry/molecular biology or related fields.

Interested candidates should apply immediately to: **Dr. M. Silverman, Director, MRC Group in Membrane Biology, Medical Science Building, Room 7226, University of Toronto, Toronto, Ontario M5S 1A8, Canada,** including curriculum vitae and names and addresses of three references.

INFORMATION SERVICES SPECIALIST

Amgen, a leader in the discovery, development, and marketing of human therapeutics through applied biotechnology, is currently seeking a VAX Services Specialist for our research department.

Responsibilities include, but are not limited to, the following user and VAX system support functions: instructing users on operating system and applications software; updating users on system configuration changes and new software; maintaining supplemental technical/instructional documentation on applications software; troubleshooting system problems; and evaluating, purchasing, configuring, and maintaining hardware and software at the central system location.

Qualified applicants must have at least a BS/BA degree, 3-5 years' experience in a VAX environment, and be prepared to provide high quality services to a research staff of over 100. Experience with DNA sequencing programs and other software packages used in molecular biology is highly desirable but not essential.

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

AMGEN, INC.
Recruitment, Dept. #531
Amgen Center
Thousand Oaks
CA 91320-1789

Equal
Opportunity
Employer

AMGEN

QA OPPORTUNITIES

The Diagnostics Division of Miles Inc., a leader in the healthcare and clinical diagnostics business, has several positions available within our Quality Assurance Development laboratories. These positions will participate in the development of QA systems for new diagnostic reagent product/instrument systems.

One position requires a M.S. or the equivalent in Applied Statistics with a strong background in a chemistry discipline. Familiarity with MS-DOS and VMS computer operating systems is required. RS-1 and SAS computer skills are a plus. Candidates must be able to work independently, developing creative approaches to complex problems. Strong communication and interpersonal skills are required to interact effectively with peers.

Another position requires a M.S. or Ph.D. (or the equivalent) with up to four years experience in clinical chemistry and/or QA. A strong background in clinical chemistry and biochemistry with special attention to analytical chemistry and instrumental techniques is desirable. Understanding of statistical QA and statistical analysis of experimental data, along with proficiency in the use of computers would be advantageous.

Two positions located in the Analytical Research Laboratory involve methods development work and analytical support services to QA, R&D and Manufacturing. The positions require a B.S. or equivalent experience in chemistry with 0 to 4 years experience. A background in analytical chemistry or analytical biochemistry is a requisite. Computer and statistical skills are desirable.

Located in Elkhart, Indiana, we offer varied recreational and educational facilities as well as convenient accessibility to the Chicago area. Starting salary commensurate with experience, plus an excellent benefits program. Relocation benefits paid by the company.

Please send a complete resume in confidence to:



Linda A. Helland
Sr. Personnel Representative
Dept. 504
Miles Inc.
Diagnostics Division
P.O. Box 70
Elkhart, IN 46515

AN EQUAL OPPORTUNITY EMPLOYER M/F/H

ELECTRONICS ENGINEER

GS-855-13

The National Institutes of Health (NIH) has a career civil service position for an Electronics Engineer at GS-13 ranging from \$42,601-\$55,381/annum, depending upon qualifications.

The position is in the image processing group, Biomedical Engineering and Instrumentation Program (BEIP), National Center for Research Resources, NIH. BEIP is a central resource providing professional engineering services and technical support for NIH scientists engaged in biological or clinical research.

The individual selected will be responsible for conceiving and designing computationally efficient algorithms for digital and image processing, including statistical and structural pattern recognition and application of these areas of expertise to the solution of biomedical research problems.

Qualifications: Candidates must hold a doctoral degree or equivalent in engineering, plus have one (1) year of professional that has equipped the applicant to be an expert in the application of image processing techniques to biological signals, including signal parameterization and representation, digital filtering design, analysis of random signals, texture characterization, compact image coding, development of applications developed for Macintosh computers. Candidates must have a significant record of publication in the scholarly literature.

An application for consideration must be received on or before June 8, 1990.

Candidates should submit Applications for Federal Employment (SF-171), curriculum vitae, bibliography, and at least three (3) references to: **Ms. Rosemary Carter, National Institutes of Health, Public Health Service, Building 12A, Room 4057, 9000 Rockville Pike, Bethesda, Maryland 20892.**

U.S. Citizenship Required/NIH is an Equal Opportunity Employer

ASSISTANT/ASSOCIATE PROFESSORS

AIDS PROGRAM AT THE SALK INSTITUTE

We are enlarging our research program on the biology of AIDS. We seek candidates working in the areas of HIV replication, host-virus interactions, viral pathogenesis and the effect of HIV infection on immune function. Our aim is to develop a program that is interactive with other major areas of research at The Salk Institute, which include Cancer Biology, Receptor Biology, Immunology, Neuroendocrinology, Retrovirology, Developmental Biology and Human Genetics.

Interested candidates should apply by July 15, 1990, by submitting a curriculum vitae, a brief description of future research plans, and the names of three references. Send application to: Dr. Inder Verma, AIDS Search Committee, The Salk Institute, P.O. Box 85800, San Diego, CA 92138.

Equal Opportunity Employer M/F/H/V



Senior Staff Scientist

Novel Drug Delivery CIBA-GEIGY, Ardsley

CIBA-GEIGY Corporation is a world leader in the research and development and marketing of novel drug delivery products. We currently seek a Senior Staff Scientist to be responsible for materials characterization and system development for transdermal systems. This position would join an established control release R & D department within an existing product pipeline.

Your Ph.D. in Physical or Polymer Chemistry must be augmented by extensive experience in polymer characterization. You must have a minimum of 3-8 years' industrial experience,

and synthesis background is desired. Specific experience with drug delivery systems or pharmaceuticals would be a definite plus.

CIBA-GEIGY offers an environment well suited to your advancement, a competitive salary and excellent benefits. For consideration, send your resume with salary history in confidence to: V. Senatore, Site Human Resources, Dept. S525, CIBA-GEIGY Corporation, 444 Saw Mill River Road, Ardsley, New York 10502-2699. We are an equal opportunity employer M/F/H/V.

Science Serving Mankind

CIBA-GEIGY

Physical Science Administrator

GM-1301-15

Atmospheric Research and
Exposure Assessment Laboratory
Research Triangle Park, NC



**U.S.
Environmental
Protection
Agency**

An Equal Opportunity Employer

The United States Environmental Protection Agency is seeking a highly qualified candidate for the position of Deputy Director of the Atmospheric Research and Exposure Assessment Laboratory (AREAL) located in Research Triangle Park, North Carolina. This is a permanent full-time position with a salary range of \$59,216-\$76,982 per annum.

The AREAL, a component of the Office of Research and Development, is responsible for developing research and development policies regarding a major segment of the Agency's programs in the areas of:

- Ambient Air Pollutant Levels and Exposure to Humans and Ecosystems
- Air Quality Monitoring Methods and Techniques, and Source Apportionment, Air Pollutant Transport, Transformation and Fate Models
- Source-to-Receptor Relationships Between Ambient Air Quality and Air Pollutant Exposures
- Long-term Research in Atmospheric Chemistry; Air Pollutant Fate, Transport, and Transformation Processes; Exposure Assessment; Analytical Chemistry; and Predictive Modeling

The incumbent must have experience in the following: planning, coordinating, evaluating, organizing, budgeting, and directing research and development programs; assisting in coordinating activities with representatives of foreign, state, municipal and federal agencies; industry; and academic and private organizations throughout the nation.

Applicants for this position must submit evidence of the following factors: 1) skill in planning, implementing, monitoring and reviewing both long and short-term scientific research programs; 2) skill in developing productivity and other effectiveness-efficiency standards; 3) skill in gathering and analyzing information; 4) skill in the utilization of human resources; 5) skill in the acquisition and administration of financial resources; 6) knowledge of federal procurement procedures; 7) skill in organizational representation and liaison; 8) skill in oral communication; 9) skill in supervising a multidisciplinary staff; 10) skill in written communication; and 11) skill in evaluating programs for effectiveness.

Please submit an SF-171 to: **Rena Sawyer, Human Resources Management Division (MD-29), US EPA, Research Triangle Park, NC 27711; or for further information, call Rena Sawyer at (919) 541-3677.** EPA is an Equal Opportunity Employer.

Carolina Workshops on

RECOMBINANT DNA TECHNOLOGY cDNA Cloning & Gene Expression July 25-August 10, 1990

A general DNA techniques workshop focusing on synthesis of cDNA and cloning into lambda vectors. Techniques will include mRNA isolation, Northern transfer and hybridization, cDNA synthesis, adapter facilitated cloning into lambda vectors, subcloning into plasmid vectors, analysis of hormone response elements, identification of trans acting regulatory factors, and transient and constitutive expression assays. Libraries will be screened with antibodies and DNA probes. As time permits, additional techniques to be utilized will include PCR, DNA isolation, restriction analysis, electroporation, assays for gene expression, gel retardation assays, mutational analysis of regulatory regions, DNA sequencing, and computer analysis. Examples from both plant and animal systems will be used throughout the course. Tuition is \$1950.

Instructors:

Neil Rebbe, Wash. U., V.A. Med. Center, St. Louis	Mark Guiltinan, UNC-CH
Ralph Quatrano, UNC-CH	William Marcotte, UNC-CH
Tom Kost, Glaxo	Al Baldwin, UNC-CH

Future Carolina Workshops

Use of Xenopus Oocytes in Cell & Molecular Biology
October 29-November 16, 1990, Brian Kay, UNC-CH

Mutagenesis & Sequencing Technology
March, 1991, Gary Pielak, UNC-CH Tom Kunkel, NIEHS



**The Program in
Molecular Biology
& Biotechnology**

For further information or to apply, contact:
Dr. Susan J. Kelly, Workshop Coordinator
University of North Carolina at Chapel Hill
Program in Molecular Biology & Biotechnology
402 Swing Building CB 7100 S
Chapel Hill, North Carolina 27599-7100

CAROLINA WORKSHOPS are a series of intensive hands-on laboratory courses designed to teach cutting edge methods in DNA technology. The techniques include basic manipulations such as isolation of insert and vector DNA, ligations, electrophoretic analysis and elution from gels, blotting techniques, preparation and labeling of probes, and identification of cloned DNA. Each course provides experience in the basic techniques which serve as a solid, basic background in DNA technology. Each individual course has an identifiable theme and emphasizes in addition to the general techniques, specialized techniques such as DNA sequencing, in vitro mutagenesis, cDNA synthesis, and/or expression vectors.

Many applicants to the Carolina Workshops already hold the M.D. or Ph.D. degree. Our courses are very heavy on hands-on contact with the protocols, light on lectures concerning the basics of molecular biology. Hence, a reasonable familiarity with the concepts behind DNA techniques such as those found in good texts (*e.g. Recombinant DNA: A Short Course* by Watson, Tooze, and Kurtz) is necessary to get a good yield from these courses. Experience with running these courses for eight years now indicates that both students with and students without any prior hands-on experience with molecular techniques find these courses useful. Experienced students benefit from in depth interaction with the instructors; novices learn the realities behind the innocent looking protocols. The results obtained in the Carolina Workshops can be considerable. In a recent Workshop one researcher generated 21kb of sequence data in the Sequencing Workshop; another created 7 cDNA libraries in the cDNA Cloning Workshop.

To apply, send a curriculum vitae and a brief letter describing your research interests and their relevance to the Workshop for which you apply. Please indicate your complete mailing address and telephone number. Applications received by **June 18** will receive full consideration.

The Carolina Workshops are supported in part by a grant from the North Carolina Biotechnology Center.

**CHIEF,
PHARMACEUTICAL
RESOURCES BRANCH
GM-15**

The Developmental Therapeutics Program plays a major role in the national effort to discover and develop agents for the treatment of cancer and AIDS. The program operates much like a pharmaceutical company, with the major functional elements found in such a company. The Pharmaceutical Resources Branch is responsible for the pharmaceutical aspects of the program, including large-scale synthesis, analytical chemistry, formulation development, large-scale manufacture of dosage forms, and shelf-life studies. These efforts are performed under contract by industrial and academic organizations nationwide, and are managed by the professional staff of the Branch. The Branch Chief directs this effort and coordinates the activities of the Branch with other preclinical and clinical components of the Division.

This position requires a Ph.D. (or equivalent) in biology, microbiology, pharmacology, chemistry, or pharmaceuticals. Preference will be given to candidates with extensive experience in drug discovery or development, especially as related to cancer or AIDS. Salary range is \$59,216 to \$76,982. U. S. Citizenship is required.

Candidates should send a copy of their Application for Federal Employment (SF-171), curriculum vitae and bibliography to:

**National Institutes of Health
National Cancer Institute
Personnel Mgmt. Branch
9000 Rockville Pike
Executive Plaza North,
Room T-43
Attn: JAC
Bethesda, Maryland 20892**

Applications must be received within 30 days of this announcement. For further technical information, interested parties may call Dr. Saul Schepartz (301)496-8720.

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POSITIONS OPEN

POSTDOCTORAL POSITION. In biochemical/molecular pharmacology to study (i) the cellular actions of interferon in growth control and differentiation and (ii) the interaction of interferon and cytokines with anticancer drugs. Opportunities for both in vitro research and clinical correlates available. Send curriculum vitae and names of three references to: **Dr. Edward Schwartz, Department of Oncology, Albert Einstein Cancer Center, 111 East 210th Street, Bronx, NY 10467.**

POSTDOCTORAL POSITION. Available immediately for Ph.D. or M.D. to study hyperplastic and neoplastic liver growth in normal and transgenic animals. Familiarity with immunohistologic and autoradiographic techniques is essential, with recombinant DNA technology preferred. Salary will be commensurate with qualifications. Please forward curriculum vitae and names or letters of reference to: **N. Tavaloni, Ph.D., Box 1039, The Mount Sinai School of Medicine of the City University of New York, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS. Mitogen Activated Protein (MAP) kinase structure and function. Postdoctoral positions available (1 June 1990 and another in 1991) to study the regulation and functions of MAP kinase, a Ser/Thr kinase regulated by tyrosine phosphorylation. Background and interest in kinases and/or phosphatases in signal transduction for growth factors. Submit curriculum vitae and names of three references to: **Dr. Tom Sturgill, Box 419, Departments of Medicine and Pharmacology, University of Virginia, Charlottesville, VA 22908. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available for studying the molecular mechanisms of lymphokine production in blood mononuclear cells. Experience in eukaryotic transcriptional regulation and DNA-protein interactions desired. Individuals with a Ph.D. in molecular biology should send a curriculum vitae and three names or letters of reference to: **Dr. Lee Levitt, Room S-161, Hematology Division, Stanford University Medical Center, Stanford, CA 94305. Please submit application by 25 June 1990. FAX: 415-723-1269. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION IN HYPERTENSION. (NIH training grant.) Research involves regulation of tissue renin, especially adrenal renin and its role as local hormone or growth factor. Techniques: molecular biology, cell culture, RIA, in vivo animal studies. Biochemistry experience desirable. Two/three years available. Must have Ph.D., M.D., D.V.M., or equivalent. Must be citizen/permanent resident of the United States. Send curriculum vitae to: **Dr. Patrick Mulrow, Department of Medicine, Medical College of Ohio, P.O. Box 10008, Toledo, OH 43699. An Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS. Two postdoctoral positions available immediately to investigate the interaction of alcohols and anesthetics with model and biological membranes. Preference given to candidates with experience in NMR and/or ESR and a strong background in physical chemistry. Experience with lipids and membranes desirable. Send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. T. F. Taraschi, Department of Pathology and Cell Biology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Molecular genetics of X-linked retinal diseases, University of Michigan. Position is available from 1 July 1990. We are using an alternate "reverse genetics" strategy of subtractions and selection cDNA cloning to identify the genetic loci for X-linked eye diseases with a particular focus on the X-linked retinitis pigmentosa and ocular albinism. Candidate should have Ph.D. or M.D. with research experience in molecular biology, genetics, biochemistry, or cell biology. Please send curriculum vitae and the names and telephone numbers of three references to: **Anand Swaroop, Ph.D., University of Michigan, W. K. Kellogg Eye Center, Room 539, 1000 Wall Street, Ann Arbor, MI 48105. The University of Michigan is an Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS. Two postdoctoral positions available immediately to study lipid and protein trafficking in malaria-infected erythrocytes. Candidates must have a strong background in cell biology and protein chemistry. Experience with fluorescence imaging microscopy is desirable. Send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. T. F. Taraschi, Department of Pathology and Cell Biology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS IN MOLECULAR VIROLOGY. To study the roles of viral replication and movement functions in determining host specificity in the plant pathogenic geminiviruses. Focus is on a combined molecular genetic and biochemical approach to the study of regulated gene expression in these single-stranded DNA viruses to define the interactions of viral proteins with their targets and identify host factors important in regulating replication and systemic movement in the plant. Studies utilize squash leaf curl and maize streak viruses, and involve engineering of cloned viral genomic components, *Agrobacterium*-mediated inoculation techniques, and transgenic plants. The Department of Microbiology at the University of Illinois (Urbana-Champaign) provides a stimulating, intellectually exciting research environment and extensive cross-campus interactions with diverse faculty in cell and developmental biology, plant biology, and biochemistry. Positions available from September 1990. Interested candidates should send curriculum vitae and a statement of research interests, experience and career goals, and arrange for three letters of reference to be sent to: **Dr. Sondra Lazarowitz, Department of Microbiology, University of Illinois, 131 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801. Telephone (office): 217-333-0390. FAX: 217-244-6697. Salaries are competitive. Deadline for applications is 1 December 1990. University of Illinois is an Equal Opportunity Employer.**

FELLOWSHIP IN BIOLOGY AND ENDOCRINOLOGY. University of California, San Diego (UCSD). Positions for M.D.'s and Ph.D.'s in September 1990, January 1991, and June 1991. Specific research areas include: molecular and cellular biology of calcium-regulating hormones and their receptors, regulation of neuroendocrine gene expression, and bone matrix proteins and minerals. Applicants must be eligible for NIH training grant. Send curriculum vitae and references to: **Dr. L. J. Deftos, UCSD, Medicine, V111-C, La Jolla, CA 92161. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL FELLOWSHIPS AVAILABLE
NEPHROLOGY SECTION
CASE WESTERN RESERVE UNIVERSITY**

Molecular Mechanisms of Renal Disease. Applications are invited for postdoctoral research positions funded by NIH institutional training grant, beginning in July 1990. (i) Analysis of transcriptional regulation of cytokine gene expression using transfection analysis, gel mobility shift assay, and DNase I footprinting. (ii) Alterations in gene in experimental models of tissue injury by hybridization histochemistry, quantitative receptor autoradiography, immunohistochemistry, and solution hybridization. (iii) Interactions of early transmembrane signal with altered gene expression. (iv) Structure-function analysis of the β -adrenergic receptor. (v) Phospholipid-derived second messengers, eicosanoids, and protein kinase C. Experience in molecular biology, cell biology, or biochemistry is desirable. Send letter of application, curriculum vitae, and letters of recommendation to: **Dr. Michael J. Dunn, Professor of Medicine, University Hospitals, 2074 Abington Road, Cleveland, OH 44106.**

POSTDOCTORAL RESEARCH ASSOCIATE. Available immediately to study immunomodulation and immune response to tumors in NIH-funded project. Research will involve application of cellular and molecular immunology to analyze in vivo models of tumor immunity.

Send curriculum vitae and names of three references to:

**Dr. Helen Gensler
Department of Radiation Oncology
Arizona Cancer Center
University of Arizona
Tucson, AZ 85724**

Minorities and women are encouraged to apply. Deadline for the position is 10 June 1990 or until the position is filled. University of Arizona is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Rensselaer Fresh Water Institute, a research center of Rensselaer Polytechnic Institute, seeks a qualified Ph.D.-level researcher for aquatic botany/aquatic plant ecology studies at the postdoctoral and research associate levels. Interests in basic and applied aspects of aquatic plant ecology are required. The position is open immediately, with salary commensurate with experience. Candidates are expected to pursue funding after the first year. Send curriculum vitae and names of three references to:

Dr. Charles W. Boylen, Director
Rensselaer Fresh Water Institute
Rensselaer Polytechnic Institute
Troy, NY 12180-3590
Telephone: 518-276-6757

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SEMINARS / TECHNICAL SUPPORT

The Genetics Computer Group, Inc. (GCG), is seeking an individual with a strong background in molecular biology/biochemistry, strong interpersonal skills, and experience with sequence analysis using computers. This position involves presentation of the GCG Sequence Analysis Software Package in seminars and hands-on training sessions as well as providing technical support for the GCG package. Applicants must have a minimum of a master's degree in molecular biology or equivalent and a willingness to travel. Previous teaching experience is recommended and computer programming experience would be helpful. Starting salary range: \$27,000 to \$32,000 plus fringe benefits. Send résumé with references to: Genetics Computer Group, Inc., 565 Science Drive, Suite B, Madison, WI 53711. Telephone: 608-231-5200.

SENIOR SCIENTIST

BIOTECH RESEARCH LABORATORIES, INC., has an immediate position opening in the Contract and Research Services Division to head up a group of up to four technicians. The group is studying a variety of viral research projects including examination of the genomic variability of HIV-1. This position will provide opportunity for collaborative projects with other scientists and career growth. Candidates must possess a Ph.D. with experience in recombinant DNA techniques (particularly with cloning and sequencing). Experience in cell culture and virology, especially with retroviruses, is a definite asset. Interested applicants please forward curriculum vitae and names of three references to:

Personnel Department
Biotech Research Laboratories, Inc.
1600 East Gude Drive
Rockville, MD 20850
Equal Opportunity Employer.

SENIOR SCIENTIST. To conduct research and development on substrate/cell/module processing and material technologies utilizing research in aluminum alloying, high efficiency processing and light trapping; work from previously initiated study requirements or propose new ideas for investigation and research and development; plan and conduct analytical and/or experimental studies to prove/disprove validity of new ideas and to develop new theories, concepts, and techniques; determine appropriate relationship between analytical and experimental phases of study for effective results; develop complex procedures and prepare design criteria for special test equipment; evaluate data in terms of significance and validity and recommend termination of investigation, if appropriate; prepare progress and final reports of findings for presentation to management; liaise with other recognized specialists in other companies, universities, and research agencies in solution of major material and/or processing problems; supervise subordinate personnel. Master's degree in metallurgy and materials science required as well as 4 years of experience in job offered or 4 years of experience as research scientist. Experience must have included industrial or academic photovoltaic research in aluminum alloying, high efficiency processing of solar cells utilizing single crystalline silicon, polycrystalline and a low cost substrate as well as investigating light trapping techniques. Applicants with functional title of Manager, Photovoltaic Research Laboratory, or Professional Officer acceptable. Forty hours: 9:00 a.m. to 5:00 p.m.; \$48,295 per year. Mail résumé and copy of ad to: Department of Economic and Employment Development, 1100 North Eutaw Street, Room #212, Baltimore, MD 21201. Job Order #8943676. Job Location: Frederick, Maryland.

Research and Development

Tissue Culture for Experimental Diagnostics and Therapeutics

GIBCO Laboratories/Life Technologies, Inc. is expanding its development of innovative products for research, biotechnology and experimental therapeutics. The Cell Culture Research and Development team of highly motivated, multidisciplinary scientists is playing a leading role in this effort. The position is available at the doctoral level (Ph.D., M.D.) or equivalent experience. Successful candidates will have relevant post-graduate research training in at least one of the following areas:

- Endothelial Cell Biology
- In Vitro Cultivation of Primary Human or Animal Cells
- Extracellular Matrices

Candidates for more senior positions must also have demonstrated administrative competence, preferably in an industrial R&D environment. Scientists who join the GIBCO R&D team will combine bench level research, technical supervision, interactions with other LTI departments, and active collaboration with leading investigators in academia and the private sector.

GIBCO has been the acknowledged leader in supplying high quality cell culture media, sera, and reagents to the research and industrial communities for over a quarter of a century. Recruitment of outstanding scientists to the Cell Culture Research and Development Department is a fundamental component to ensure GIBCO's leadership in this demanding and innovative field.

GIBCO offers an attractive benefits package and competitive salary commensurate with experience and job responsibilities. GIBCO Laboratories is located in scenic Western New York State, which offers a wide variety of cultural, recreational and educational opportunities, a reasonable cost of living, and an excellent quality of life.

Interested candidates should send curriculum vitae, career interests, salary history, and bibliography to:

Mr. Harry Cardin,
Personnel Manager
GIBCO Laboratories
3175 Staley Road
Grand Island, NY 14072

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SCIENTIST/ RESEARCH ASSOCIATE

Merck Sharp & Dohme Research Laboratories is currently offering an opportunity to join an established HIV biology laboratory to participate in HIV therapeutics and vaccine programs. Research efforts within the laboratory include the study of the molecular targets of proprietary antiviral compounds and the analysis of immune responses to specific HIV immunogens.

The successful candidate will possess experience in cell culture and virology, and will be familiar with molecular and immunologic techniques. Persons with a B.A./B.S./M.S. and previous research experience, or with a Ph.D., are invited to apply.

Excellent salary and benefit programs accompany this position at our West Point laboratories located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter to **Personnel Manager, Ad #B-19, Research Personnel, WP42-2, Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.**

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Merck & Co., Inc.

ANALYTICAL RESEARCH

Bristol-Myers Squibb Pharmaceutical Research Institute has the following opportunities available in our state-of-the-art research facility in Wallingford, CT.

Separation Scientist

Scientist will develop separations for proteins, peptides, isolated natural products and novel pharmaceuticals, research separation mechanisms and the development of new and novel approaches to separation problems. Requirements include a PhD in Biochemistry, Chemistry or Biology (with a strong chemistry background) and 1 to 5 years research experience with modern electrophoresis and HPLC equipment.

Postdoctoral Scientist

Postdoctoral appointment will be for one year with option for renewal. Selected individual will join a biological NMR spectroscopy group and conduct NMR experiments involving enzyme mechanisms, in vivo NMR studies and NMR imaging. Requirements include a PhD in BioPhysical Chemistry/Biochemistry.

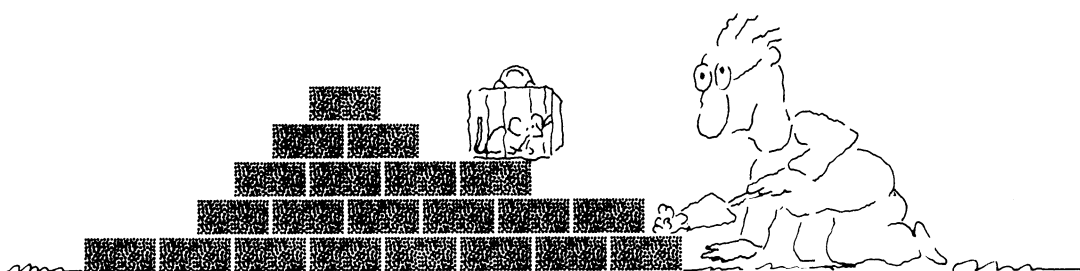
We offer excellent research facilities in well-equipped laboratories, an interactive, fertile and interdisciplinary scientific environment and a commitment to drug discovery and development. Our salaries and comprehensive benefits program are among the best in the industry. For confidential consideration, forward a resume with salary history to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. MH-039, 5 Research Parkway, Wallingford, CT 06492-7661.** An equal opportunity employer.

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Pharmaceutical
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The Global Weekly of Research
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Tenure Track Assistant Professorship Neurobiology of Aging and Alzheimer's Disease

The Department of Neurobiology and Anatomy
University of Rochester

We are searching for a new faculty member to join an interdepartmental, multidisciplinary group studying aging and Alzheimer's disease (AD). A joint appointment in another department is possible. Previous experience in aging brain and AD is highly desirable. Position requires outstanding credentials in either molecular neurobiology, protein chemistry of brain or experimental neuropathology. A recently funded grant will provide significant research support for three years and substantial salary support for seven years subject to NIA-NIH approval of the candidate and her/his proposed research. Send cover letter stating research interests, resume, names of three or more references and reprints of no more than three senior authored articles to:

Professor Paul D. Coleman
Department of Neurobiology & Anatomy
University of Rochester Medical Center
601 Elmwood Ave.
Rochester, NY 14642

MOLECULAR BIOLOGIST/ BIOCHEMIST

Merck Sharp & Dohme Research Laboratories, a world leader in medical research, is offering an excellent career opportunity in the Department of Cellular and Molecular Biology. The position will focus on the isolation and expression of genes of potential pharmaceutical interest. Responsibilities include the utilization of a broad spectrum of molecular biological techniques, including construction of cDNA and genomic libraries, DNA/RNA preparation, blot analysis, DNA sequencing, DNA vector constructions and expression. Other important skills include tissue culture and protein biochemistry.

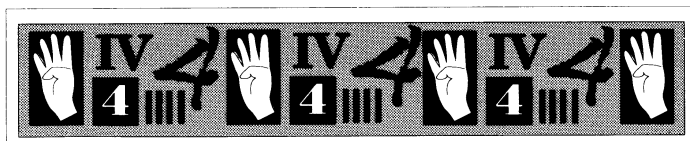
A Masters or Bachelors degree in Biology/Biochemistry or the equivalent with at least 2 years of broad and significant experience in molecular biology is required.

Excellent salary and benefit programs accompany these positions at our research facilities located 25 miles northwest of Philadelphia in Montgomery County. Please send resume to **Personnel Manager, Ad #B-18, Research Personnel, WP42-2, Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.**

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POSITIONS OPEN

POSTDOCTORAL POSITION MOLECULAR VIROLOGY

An NIH-funded position (with Harvard Medical School appointment) for M.D./Ph.D. is available summer/fall 1990 in a laboratory studying reovirus receptor(s) and cell biology of reovirus infections. Applicants should have a strong background in virology or cell biology and an interest in expression cloning. Send curriculum vitae and names of three references to: **Dr. E. Maratos-Flier, Research Division, Joslin Diabetes Center, Boston, MA 02215.** An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE. In cell biology of protozoan parasites. To conduct in vitro testing of a new family of anti-protozoan drugs. M.D., Ph.D. in biology or equivalent degree is required with at least 6 years of experience in parasite culture of different developmental stages, cell biology, and biochemistry of *Trypanosoma cruzi* and *Leishmania*. Please send curriculum vitae and names of three references to: **Dr. James H. McKerrow, Department of Pathology, School of Medicine, University of California-San Francisco, San Francisco, CA 94143-0506.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

A postdoctoral position is immediately available to study: (i) the regulation of membrane lipid metabolism in lymphocytes undergoing growth and differentiation or (ii) the role of membrane lipids in lymphocyte function. Requirements are a recent Ph.D. in immunology or biochemistry and previous experience in cellular immunology or molecular biology. Nationally competitive salary plus fringe benefits. Send curriculum vitae and names and addresses of three references to: **Dr. Thomas M. Buttke, Department of Microbiology and Immunology, East Carolina University School of Medicine, Greenville, NC 27858-4354.** East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employability at the time of employment. It is requested that this documentation be included with your application.

POSITIONS OPEN

NEUROBIOLOGY

POSTDOCTORAL POSITIONS available immediately in laboratories studying nerve regeneration, neuronal plasticity and neuronal development. Research faculty studying recovery of function utilize transplantation, behavioral, neuroanatomical, and neurophysiological methods. Laboratories investigating problems of neural development utilize primary cell culture, molecular, and immunochemical strategies to study cell lineage, neurotrophism, and neural circuit formation. Faculty include Timothy J. Cunningham, Ph.D.; Pat R. Levitt, Ph.D.; Michael E. Goldberger, Ph.D.; Marion Murray, Ph.D.; Martha Nowycky, Ph.D.; Martin Pinter, Ph.D.; Peter D. Chantler, Ph.D.; and E. Hazel Murphy, Ph.D. Send curriculum vitae and names of references to:

Dr. E. H. Murphy
Department of Anatomy
Medical College of Pennsylvania/EPPI
3200 Henry Avenue
Philadelphia, PA 19129

Medical College of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR OR RESEARCH ASSOCIATE

GENETIC EPIDEMIOLOGY/BIOSTATISTICS: Candidate should have a Ph.D. in biostatistics, statistics, genetic epidemiology, or related field, with research interests in genetic methodology and its applications to human growth, body composition, and genetic linkage.

HUMAN BIOLOGY: Candidate should have a Ph.D. in human biology, physical education, physical anthropology, or related area to work in the Fels Longitudinal Study of physical growth, body composition, and risk factors for cardiovascular disease.

Review will begin 1 June 1990. Positions available 1 July 1990; open until filled. Send curriculum vitae, description of interests, and list of three references to: **Alex F. Roche, M.D., or Roger M. Siervogel, Ph.D., Division of Human Biology, Department of Community Health, Wright State University School of Medicine, 1005 Xenia Avenue, Yellow Springs, OH 45387.** Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE II. Involved in rice/maize transformation system research. Studies gene expression, transcription of DNA to protein, and molecular analysis of genes and integration into rice/maize. Requires Ph.D. in plant physiology. Special requirements: must have following skills from period of education/experience: research on rice tissue culture for callus generation and plant regeneration; experience in DNA recombinant techniques such as DNA isolation, Southern blot, and molecular cloning so as to perform gene fusion and molecular analysis; examination of plant cell structures using light or scanning electron microscope; research in major rice fungus pathogene for selection of rice disease-resistant plants; cultivation and conventional breeding of rice. Hours: 8 a.m. to 5 p.m. Salary: \$24,000 per year. Send résumés to: **New York Department of Labor, 40 Main Street, Binghamton, NY 13905.** Reference: **Job Order #0500687.** Job is in Ithaca, New York.

PHARMACOLOGY RESEARCH ASSOCIATE.

A major research institution seeks a research associate to be involved in the pharmacology/electrophysiology of normal/cystic fibrosis tissues which include (i) optimizing tissue culture conditions; (ii) epithelial electrophysiology (Ussing chamber study, efflux study, patch clamping study, microperfusion, etc.); (iii) molecular biological and immunological study of Cystic Fibrosis Transmembrane Regulator (CFTR) (PCR experiment, monoclonal antibody of CFTR, etc). The employee must hold the M.D. or Ph.D. degree with training in classical, clinical, and biochemical pharmacology and physiology, including knowledge of or familiarity with pharmacology studies on animals and drug tests and evaluation of patients and normal individuals; tissue culture; virus handling; pharmacokinetic analysis by HPLC and computer-assisted data acquisition; radioisotope handling. Two years of experience required. Employee is expected to be able to operate the following equipment: HPLC, UV and Fluorescence Detector, Programmable Integrator, Autosampler, LKB counter, ELISA. Salary: \$2750 per month. Interview/job site: Stanford, California. Send this ad and résumé to: **Job #KV14660, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 16 June 1990.

FELLOWSHIP AT NIH

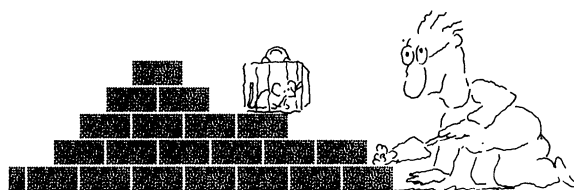
National Institutes of Health, Public Health Service, Fellowship in Anatomy, Cell Biology, Molecular Biology, as related to Alzheimer's disease and Down syndrome (trisomy 21). The Laboratory of Neurosciences at the National Institute on Aging, NIH, invites applications for a Staff or other Fellowship position to study gene expression in the nervous in experimental models and in the human brain. Electron microscopic, histological, immunocytochemical and in situ methods are employed to examine regional gene expression and local pathological process, in relation to neurodegenerative disorders or aneuploidy. The applicant should be experienced in these methods, in the study of human brain tissue, and possibly in tissue culture and tissue transplantation techniques. Studies are conducted on brain tissue from Alzheimer's disease and Down syndrome patients, and from mouse trisomy 16 (model for human trisomy 21) and other aneuploid mouse preparations. Position is located in Bethesda, Maryland and salary is commensurate with qualifications. Send Curriculum Vitae and 2 letters of reference to:

**Dr. Stanley T. Rapoport, Chief
Laboratory of Neurosciences
Building 10, Room 6C-103
National Institutes of Health
9000 Rockville Pike
Bethesda, Maryland 20892**

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FACULTY POSITIONS IN THE MOLECULAR PHARMACOLOGY OF CANCER

The Department of Pharmacology and the Lineberger Cancer Research Center of the University of North Carolina at Chapel Hill are seeking to recruit one or more outstanding individuals to tenure track positions in the area of basic research related to cancer. Positions are available immediately, and rank will be commensurate with ability and experience.

Preference will be given to individuals with demonstrated competence in applying modern techniques of molecular biology, biochemistry or biophysics to fundamental problems in cancer pharmacology, and molecular oncology. Potential areas of interest would include, but not be limited to, the following: regulation of gene expression by oncogenes or growth factors; signaling mechanisms involved in growth control; molecular bases of drug resistance; mechanisms of action of novel anticancer drugs.

Successful candidates will be expected to establish well-funded independent research programs, to participate in the graduate and professional educational activities of the Department, and to interact closely with members of the Lineberger Cancer Research Center.

Applicants should send a curriculum vitae, a statement of research plans and the names of three referees to:

R. L. Juliano, Ph.D.
Professor and Chairman
Department of Pharmacology
CB # 7365, 1106 Fac. Lab Office Bldg.
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7365

Women and minority candidates are encouraged to identify themselves. Candidates are urged to apply prior to July 15, 1990. The University of North Carolina at Chapel Hill is an equal opportunity/affirmative action employer.

CHAIRPERSON, DEPARTMENT OF PREVENTIVE MEDICINE

Rush Medical College and Rush-Presbyterian-St. Luke's Medical Center are seeking a Chairperson for the Department of Preventive Medicine. Candidates must be nationally recognized and have both clinical interests and research experience as well as demonstrated leadership and managerial skills. Requirements: M.D. degree; documented ability to conduct clinical research and to establish new research programs. There should be proven ability to organize and direct clinical programs utilizing epidemiology and biostatistics, and to integrate teaching and research programs. Nominations and applications along with curriculum vitae should be sent by July 15, 1990 to:



Erich E. Brueschke, M.D.
Chairman, Search Committee for
Chairperson of Preventive Medicine
Rush-Presbyterian-St. Luke's Medical Center
600 South Paulina Street, AcFac 764
Chicago, Illinois 60612

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CARDIOVASCULAR PHARMACOLOGY

The Sterling Research Group has an immediate opening for a Senior Research Biologist in the Cardiovascular Pharmacology Department at its Rensselaer, New York, facility.

This position requires a Ph.D. in molecular biology, biochemistry or pharmacology with two or more years of relevant postdoctoral experience. This individual should have expertise with mRNA and DNA preparation, cell transfection, primary cell culture and cell line maintenance. Experience in the area of cardiovascular pharmacology/physiology is desirable. This individual will be part of a multidisciplinary approach to drug discovery by participating in ongoing drug discovery programs and also by initiating new research ideas focused on the treatment of cardiovascular diseases.

Interested and qualified applicants should send their curriculum vitae in confidence to: **SRG-104-90, Sterling Research Group, A Division of Sterling Drug Inc., 81 Columbia Turnpike, Rensselaer, New York 12144.** An equal opportunity employer M/F/H/V.



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RESEARCH SCIENTIST Electrophysiology

The Upjohn Laboratories Division of The Upjohn Company has an opening for an electrophysiologist scientist to participate in a program directed at the understanding of plasmalemmal K⁺ channel function and regulation in a variety of cell systems. This individual will be an integral part of an exciting interdisciplinary team that will undertake physiological, pharmacological, biochemical, and molecular biology approaches to the above research objectives. It is expected that the candidate will have a Ph.D. in biological sciences and an established record of excellence in ion channel research using a variety of electrophysiological techniques including patch clamp.

Experience in the study of K⁺ channel electrophysiology using native cells, lipid bilayer, or oocytes will be considered a plus.

Upjohn's commitment to its employees is demonstrated by its competitive compensation and benefits package in addition to a stimulating, multidisciplinary research environment at our modern laboratories in Kalamazoo, Michigan. Upjohn committed over \$400 million to research and development in 1989 and is increasing its main research facility by 50%. Interested applicants are invited to forward their cv/resume and a summary of academic and research experience in confidence to: **THE UPJOHN COMPANY, CORPORATE RECRUITING, KALAMAZOO, MI 49001-9988. Refer to position number 5690-HA in your cover letter.** An Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...

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The Deutsches Krebsforschungszentrum (German Cancer Research Center) offers a position as

Head of a Project Group in

GENETIC EPIDEMIOLOGY

Possible areas of research include:

- (a) studies of heritable aspects of cancer and related diseases, e.g., complex segregation analysis, linkage analysis and gene-environment interactions
- (b) epidemiological and/or molecular studies of somatic cell changes in human cancer.

The applicant should develop a strong research programme in genetic epidemiology involving active collaborations with other research fields of the German Cancer Research Center, e.g., epidemiology, biostatistics, molecular biology and genetics.

We are looking for a qualified scientist with outstanding records and experience in epidemiology or human genetics.

The position is limited to 5 years with a salary in the range of approximately DM 79,000, — per annum. It offers applicants the opportunity for research in a well equipped laboratory. Positions for two postdocs and two technicians will be available.

Applicants should submit their curriculum vitae, a list of publications and references by June 30, 1990 to Prof. Dr. H. zur Hausen, Wissenschaftl. Stiftungsvorstand des Deutschen Krebsforschungszentrums, Im Neuenheimer Feld 280, D-6900 Heidelberg, West Germany.

RESEARCH SCIENTISTS

Protein Biochemist and Molecular Biologist. Two positions exist for PH.D.s with 0-5 years of experience to study expression, secretion, and purification of biologically active heterologous proteins from yeast and filamentous fungi. The candidates must possess excellent communication and organizational skills and relevant skills in molecular genetics and/or protein biochemistry. Prior research experience with fungi is desirable. The individuals must take scientific initiative and responsibility for projects and project development.

Hawaii Biotech offers excellent salary and benefits, opportunity for equity participation, and a location with quality of life second to none. Send application, curriculum vitae and names of three references to:

Dr. John M. Ivy, Ph.D.
Scientist, Group Leader
Hawaii Biotechnology
Group, Inc.
P.O. Box 1057
Honolulu, Hawaii 96701



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POSITIONS OPEN

CANCER RESEARCH SCIENTIST. Ph.D. (two positions) in molecular immunology, requiring expertise in DNA sequencing, PCR, dot blot hybridization, Northern hybridization blot, RNA and DNA isolation and purification; also experience with integrins and targeting of monoclonal antibody drug conjugates to normal and neoplastic cells. Salary: \$25,000 to \$30,000. Send curriculum vitae and three letters of recommendation to: **Dr. Richard B. Bankert, Department of Molecular Immunology, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263.** *Equal Opportunity/Affirmative Action Employer.*

SENIOR ENGINEER. Provide technical expertise and supervision to Water and Wastewater Treatment Technology Laboratory. Duties include: train junior group members in laboratory procedures; develop laboratory testing procedures to assess treatment technologies for industrial waste management applications; write technical proposals for process development projects to evaluate processes efficiencies for wastewater and groundwater treatment applications; supervise one to three scientists, engineers, and/or technicians in completing treatment studies; implement and conduct computerized data acquisition, management, statistical analysis, data reduction, interpretation, and presentation; interface with plant and division personnel on status, direction, and preliminary results of development projects, write reports and present results of development projects; and keep abreast of state-of-the-art treatment technologies. Requires Ph.D. in environmental engineering and 2 years of experience in job or 2 years of experience as environment engineer. Experience must include conceptual engineering and treatability study design and implementation in wastewater treatment, and application of USEPA standard procedures for chemical analysis of environmental pollutants. Salary: \$45,500 per year; 40 hours per week. **Job Order #NC4092893, DOT Code 029.167-014.** Apply to: **Job Service 20005-B, South Elm-Eugene Street, Greensboro, NC 27406,** or nearest Job Service office.

SENIOR RESEARCH ASSOCIATE. For medical care and research center in northeastern Ohio to perform cardiac research into the role of leukotrienes and the interaction of prostaglandins in the pathophysiology of ischemic cardiac injury, arrhythmias, and ventricular recovery through reading, monitoring, and analysis of blood gases; performance of radioimmunoassays of arachidonic acid metabolites; monitoring and analyzing EKG output; attaching Holter monitors and reading and interpreting the data output; consolidation of generated data for computerized analysis using custom-designed data analysis programs and Summagraphics software programs on IBM PC. No experience required in job described, but applicants will qualify with the following: M.D. or foreign equivalent as determined by approved credentials evaluation agency; 1 year of post medical school internship; 1 year of post medical school internship must have included at least 4 months of experience in general surgery, surgical techniques and anesthesia; 1 year of post medical school internship must also have included at least 4 months of experience in using, reading, and interpreting Holter monitors and their output. Forty hours per week, 8 a.m. to 5 p.m.; \$24,000 per year. *Must have proof of legal authority to work permanently in the United States.* Qualified applicants send résumé (no calls) in duplicate to: **J. Davies, JO# 1084545, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

VIROLOGIST. At Northwestern University Medical School. A tenure-track university faculty position in the Department of Pathology offering the opportunity for a major commitment to research with a modicum of hospital service. The successful candidate can be either an M.D. or Ph.D. who has an active research program and experience in the laboratory diagnosis of AIDS. Faculty rank and salary will be commensurate with the level of qualification and academic development. In addition, the candidate will have administrative leadership of a BL-3 level research/diagnostic laboratory. The institution has made a major commitment to AIDS and has an NIH Comprehensive AIDS Center and an active multidisciplinary group of AIDS investigators. Interested candidates should submit curriculum vitae by 30 June 1990 to: **Dr. Dante G. Scarpelli, Chairman, Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.

POSITIONS OPEN

WILDLIFE ECOLOGY POSITION. ASSISTANT PROFESSOR, tenure-track, 12-month position divided teaching (.60) and research (.40). Responsibilities include teaching at least three undergraduate courses once a year and developing a research program on the structure and dynamics of North American vertebrate wildlife populations or systems. Applicants must have a Ph.D. degree in wildlife ecology or a closely related field and be very capable in applying quantitative techniques and modeling ecological processes. Applications will be accepted through 31 August 1990 or until a suitable candidate is identified. For further information contact: **Dr. Harmon P. Weeks, Jr., Chair, Search Committee, Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907.** Telephone: 317-494-3590. *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

SITUATIONS WANTED

ANATOMIST. Very experienced in teaching medical gross anatomy; have also taught neuroanatomy. Active research, neurophysiology of brainstem. Seeks teaching/research. Telephone: 809-728-3729 or 809-758-2525, ext. 1511.

BIOCHEMIST, Ph.D., 12 years. Proteins, structure/function, enzyme purification. Strong medical background, academic experience, grants, fellowships. Seeks industrial/academic/government position. **Box 44, SCIENCE.**

BIOLOGIST. Managerial, supervisory position preferable. Cell biology, microbiology, immunology, bacteriology, biochemistry, molecular biology. Solid funding only. Baltimore/Washington area. **Box 41, SCIENCE.**

Experienced (industry, government) Ph.D. **ENVIRONMENTAL SCIENTIST** (ecotoxicology, risk assessment). Seeks industry research/environmental policy position. Excellent communication and quantitative skills. **Box 47, SCIENCE.**

Ph.D. **CHEMIST** with research experience in synthesis, polymerization, controlled release, instrumentation, and analysis. Seeks position with an academic/nonprofit organization. **Box 45, SCIENCE.**

PLANT PHYSIOLOGIST/AGRONOMIST. Ph.D. (1990), desires position working with research/extension/teaching. Background: environmental physiology, extensive teaching, and overseas experience. **C. Meisner, 3111 Miller Plant Science Building, University of Georgia, Athens, GA 30602.** Telephone: 404-542-0921.

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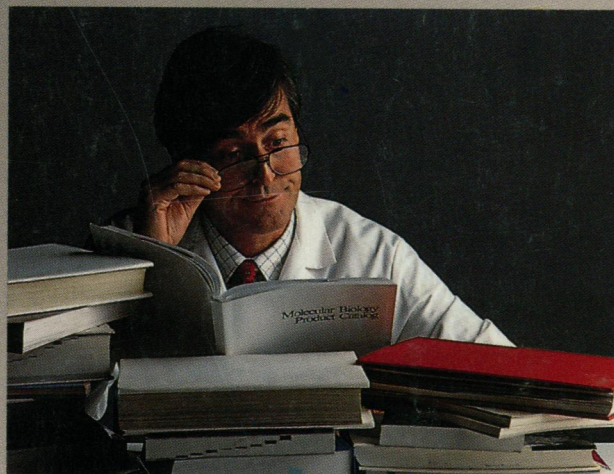
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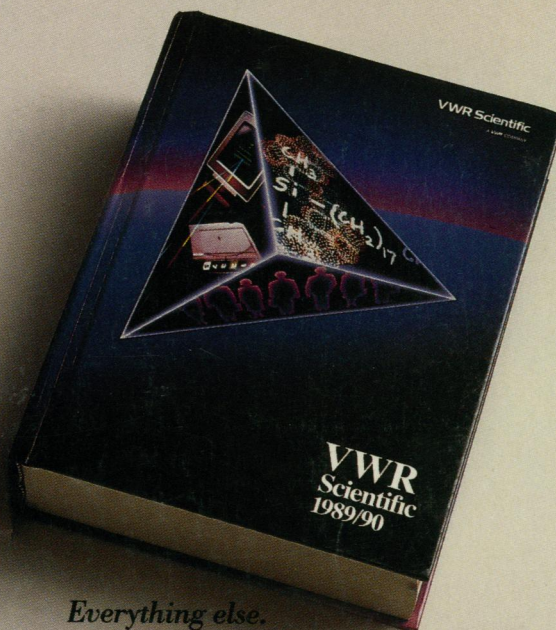
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