

Precast Gel for High Molecular Weight Separations

PhastGel Gradient 4-15 is a new gel designed for the separation of very large, globular molecules such as macroglobulins, immunoglobulins (IgC and IgM), and lipoproteins. The gel is also suitable for forensic haptoglobin typing and the separation of larger oligonucleotides. Separation times are 30 min for sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and 60 min for native PAGE. For native separations, the molecular weight range for globular proteins is 150,000 to more than 1,000,000 daltons. For SDS separations, the linear range is 30,000 to more than 300,000 daltons. Pharmacia LKB Biotechnology. Circle 471.

Mass Spectrometer

The BIO-Q is a triple quadrupole mass spectrometer for the molecular weight determination and structural elucidation of biomolecules. Total analysis time is less than 5 min. Samples are introduced in solution, either by direct injection or via a separation technique such as liquid chromatography. An electronic spray ionization source, operating at atmospheric pressure, then produces a series of multiply charged ions. From these ions the molecular weight of the sample is determined to an accuracy of better than 0.01%. The molecular weight range is up to 66,000 daltons or more. VG Instruments. Circle 476.

Slotted Glass Plates for Electrophoresis

Supercast slotted glass plates and spacer systems are available for vertical gel electrophoresis. The system consists of a standard notched or offset glass plate, a second plate with a horizontal slot at the bottom, and a single U-shaped spacer. The slot is covered with tape during casting. The U-shaped

spacer does not have to be removed after casting. The tape is removed to run the gel, allowing contact between the gel and the buffer in the lower buffer chamber. The system eliminates leakage at the seams of traditional spacers, the need to remove the lower spacer before running the gel, and the problem of bubbles sticking under the lower surface of the gel. Owl Scientific Plastics. Circle 486.

Colony Counter

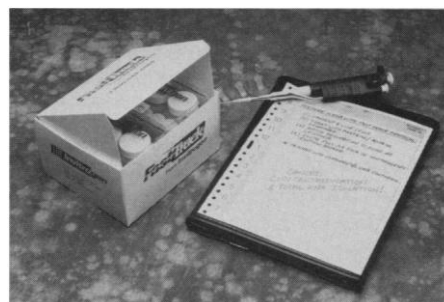
Protos is a powerful, inexpensive colony counter that combines the latest video and computer technology. A wide variety of colonies can be evaluated with Protos, including bacteria, cells, and plaques on various media, such as opaque and transparent agars, membrane filters, and agarose gels. The instrument can count objects of any shape provided there is a detectable contrast between the sample and the background. The instrument is operated with a computer-style mouse for selection of menus and system settings shown on the color display alongside the image of the sample. Additional features include continuous shade correction for unevenly poured plates. Analytical Measuring Systems. Circle 473.

Enzyme for DNA and RNA Sequencing

IBI Taq Polymerase is an ultrapure modifying enzyme for use in DNA and RNA sequencing and polymerization. It is designed for use in high-temperature incubations of single- and double-stranded DNA. Derived from *Thermus aquaticus*, IBI Taq Polymerase is available as a 100-unit vial. Each vial comes with a reaction buffer that is tested to ensure continued activity at temperatures above 90°C. International Biotechnologies Inc. Circle 484.

Messenger RNA Isolation

FastTrack is a system for the isolation of high-quality, intact messenger RNA directly from cells or tissue. The entire procedure can be completed in less than 4 hours without ultracentrifugation, cesium chloride, or toxic chemicals. The process involves lysis of the cells and direct affinity absorption. The unbound cellular debris, including chromosomal DNA, ribosomal RNA, membranes, and other macromolecules, are removed from the resin during washes while the messenger RNA remains bound until it is eluted with low-salt buffer. FastTrack can be



used to purify intact messenger RNA from large or small samples, and all washes and elutions can be accomplished with short spins in microcentrifuge tubes. Invitrogen. Circle 489.

Literature

The newly updated *CSL/WL 1989-90 Reference Standards Catalog* offers the most extensive line of commercially available environmental contaminant standards. Among the many new additions to the catalog are methylated chlorinated dibenzo-*p*-dioxins, dibenzofurans, and the special indicator compound, 2,3,6,7-tetrachloroxanthene. Several new unlabeled, mass-labeled, and tritiated dibenzo-*p*-dioxin and dibenzofuran congeners have been added to the product line. Chemsyn Science Laboratories/Wellington Laboratories. Circle 496.

The 1990 *Analtech Thin-Layer Chromatography Catalog* features the most complete line of analytical and preparative thin-layer chromatography plates and accessories available from a single source. Analtech. Circle 499.

Applications Guide to High-Performance Polymeric HPLC Columns contains many applications as well as guidelines for the selection of the proper column for the analysis of compounds in the biological, pharmaceutical, chemical, industrial, and environmental areas. Eighty-four chromatograms demonstrate the broad versatility of polymeric HPLC columns by reversed phase, ion exchange, ion exclusion, and other modes of action. EM Science. Circle 504.

The third edition of the *ATCC/NIH Repository of Human and Mouse DNA Probes and Libraries* lists materials deposited at the American Type Culture Collection as part of the genetic repository supported by the National Institutes of Health. The 136-page catalog contains information on human chromosome-specific genomic libraries, human and mouse genetic probes and cloned genes, probes and clones for oncogenes and transforming proteins, bacterial hosts for transformation or plating libraries, and other complementary DNA and genomic libraries. American Type Culture Collection. Circle 507.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year, and is mailed on issue date. Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

LINE CLASSIFIED ADVERTISEMENTS

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

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

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. No cash discount. Prepayment required for all foreign ads. Purchase orders required for all other advertising.

To **ESTIMATE** ad cost, structure ad copy on a 52-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines \times \$41 = approximate cost 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.)

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

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

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

Address ad copy or requests for information to:

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

MARKETPLACE AND DISPLAY PERSONNEL ADVERTISEMENTS

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

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

RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications.

SCIENCE encourages applicants for positions to investigate employment laws, nondiscrimination policies, visa requirements, and cultural differences in the country advertising for employees.

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

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

POSITIONS OPEN

ANATOMIST POSITION ASSISTANT/ASSOCIATE PROFESSOR OF BIOLOGY TENURE TRACK (FALL 1990)

Doctorate in human/animal (mammalian) anatomy, with strong emphasis in developmental biology and/or endocrinology; to teach courses in human anatomy, developmental biology, physiology, and/or endocrinology. Strong commitment to teaching required; experience preferred. We seek a broadly trained investigator who is capable of establishing an independent research program and directing master's and undergraduate students in the above areas. Mankato State University (enrollment: 16,000; 80 miles south of Minneapolis/St. Paul) with its modern facilities provides an excellent opportunity for professional growth. All applicants must be able to legally accept employment in the United States and have demonstrated ability to communicate effectively with students and colleagues. Submit application including statement of teaching and research interests, curriculum vitae, official undergraduate and graduate transcripts, and three letters of reference to: **Dr. William Bessler, Chair, Department of Biological Sciences, Box 34, Mankato State University, Mankato, MN 56002.** Application deadline is 23 March 1990 or until filled. *Mankato State University is an Equal Opportunity/Affirmative Action Educator and Employer.*

ANATOMY AND NEUROSCIENCES

Department of Anatomy-Neurosciences at University of Texas Medical Branch at Galveston, Texas (UTMB), has a tenure-track position for an **INVESTIGATOR** with minimum of 2 years of postdoctoral experience and teaching experience in gross anatomy. Applicant should have an active and ongoing research program in modern medical sciences. Will be expected to teach gross anatomy. Please submit curriculum vitae and personal statement detailing research interests and teaching experience, including the names of three referees, to: **Gwen V. Childs, Ph.D., Chairperson, Search Committee, UTMB, Department of Anatomy-Neurosciences, Sealy-Smith Building, 200 University Boulevard, Room 724, Route H-43, Galveston, TX 77550.** Application deadline: 1 April 1990; position filled by: 1 August 1990. *UTMB is an Equal Opportunity M/F/V/H Affirmative Action Employer. UTMB hires only individuals authorized to work in the United States.*

ASSISTANT PROFESSOR BIOLOGY DEPARTMENT WILLIAMS COLLEGE

Tenure-track position beginning July 1990 for a broadly trained **BIOLOGIST** with strong interests in both teaching and research. Development of a research program capable of obtaining extramural funding and involving undergraduate students is expected. Normally, faculty members teach one course and two laboratory sections each semester. Ability to teach in one or more of the following areas is desired: molecular endocrinology, comparative physiology, immunology, cellular physiology.

Ph.D. required, postdoctoral experience desirable. Please send curriculum vitae, statement of teaching and research interests, and three letters of reference by 15 February 1990 to: **Chairman, Search Committee, Department of Biology, Williams College, Williamstown, MA 01267.**

An Equal Opportunity/Affirmative Action Employer. Williams College especially welcomes applications from women and minority candidates.

ASSISTANT PROFESSOR MATERNAL-FETAL MEDICINE

The University of Alabama at Birmingham (UAB), Department of Obstetrics and Gynecology, is seeking to fill a faculty position. Candidate must be Board-eligible or Board-certified. Sub-interests should include research regarding the endocrinology of pregnancy, fetal lung maturation, collaboration with basic scientists in those areas as well as an infectious disease research laboratory directed toward the pathogenesis of premature rupture of the membranes and premature labor.

Interested persons please apply by 28 February 1990 to: **John C. Hauth, M.D., Professor and Division Director, Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, UAB Station, Birmingham, AL 35294.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

APPLIED SCIENTISTS

Applied scientists sought, B.S., M.S., Ph.D., for environmental analysis and permitting. Prefer training and/or experience in southeastern United States. Expertise sought in botany, wildlife, wetlands, CAD, GIS, water quality and statistics. Send résumé to: **Personnel Department, Breedlove Dennis and Associates, Inc., 2412 Forsyth Road, Orlando, FL 32807.** *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR of biochemistry to conduct research on the molecular aspects of alcohol dependence, in particular, the effect of ethanol on signal transduction systems and a search for genes associated with alcoholism; isolation and characterization of enzymes from human tissues or cultured cells; supervision of students. Ph.D. in chemistry or biochemistry and at least 4 years of postdoctoral experience in the use and application of spectroscopic methods in the biomedical sciences. Salary: \$41,000 per annum. Please send résumés to: **Massachusetts Department of Employment and Training, Special Program Department, 19 Staniford Street, Boston, MA 02114,** and refer to job reference #00189.

ASSISTANT PROFESSOR OF EPIDEMIOLOGY OF INFECTIOUS DISEASES

Yale University School of Medicine, Department of Epidemiology and Public Health, invites applications for a tenure-track position as an assistant professor in the Yale Arbovirus Research Unit, available 1 July 1990. Candidates should have postdoctoral experience in application of molecular techniques to arbovirus epidemiology, and demonstrated potential to obtain research support. The appointee will be expected to interact with other members of the arbovirus unit, to participate in arbovirus reference center activities, and to teach and direct the research of graduate students. Send curriculum vitae, a summary of research interests, and names of three references by 1 March 1990 to: **Dr. Robert E. Shope, Department of Epidemiology and Public Health, Yale University School of Medicine, Box 3333, New Haven, CT 06510.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

EAST TENNESSEE STATE UNIVERSITY

ASSISTANT PROFESSOR in Department of Microbiology for Ph.D. molecular biologist. Research experience and applications in regulation of gene expression required. Department strengths: cytokines, regulation of cell function, regulation of viral genes, and microbial pathogenesis. Applicants must apply molecular biology techniques to one or more of these areas, must establish/maintain independent and collaborative research programs, and teach medical and graduate students. Non-tenure-track position. Competitive salary, start-up funds, location in geographically desirable area. Send curriculum vitae, statement of research interests, and three reference letters to: **Dwight W. Lambe, Jr., Ph.D., Chairman, Department of Microbiology, James H. Quillen College of Medicine, East Tennessee State University (ETSU), Box 19,870A, Johnson City, TN 37614.** *ETSU is an Equal Opportunity/Affirmative Action Employer.*

YALE UNIVERSITY/PETROLOGY. The Department of Geology and Geophysics invites applications for an **ASSISTANT PROFESSOR** position in the area of metamorphic/igneous petrology. We are particularly interested in field-based studies of regional-scale processes. Research areas may include, but are not restricted to, the evolution of orogenic belts, fluid and heat flow during orogenesis, physico-chemical and kinetic constraints on the history and evolution of metamorphic and igneous rocks, and the chronology of orogenic events. The appointment will complement existing programs in stable isotopic geochemistry, kinetics of geochemical reactions, tectonics of convergent margins, and processes of granitic magmatism.

Applicants should submit a letter of application, curriculum vitae, publications, and the names and addresses of at least three references to: **Dr. Barry Saltzman, Chairman, Department of Geology and Geophysics, Yale University, P.O. Box 6666, New Haven, CT 06520.** Completed applications must be received by 1 April 1990.

Yale University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR OF MICROBIOLOGY

Applications are invited for a 12-month tenure-track position at the rank of assistant professor in the Department of Pathobiology at the University of Pennsylvania, School of Veterinary Medicine. The appointment will be made in the Laboratory of Microbiology, Division of Pathobiology, starting in July 1990. The successful candidate will be expected to have expertise in and conduct research in the area of the molecular and/or cellular basis of bacterial pathogenesis. Teaching responsibilities involve participation in a team-taught core microbiology course for veterinary students. In addition, the candidate will have the opportunity to participate in a joint graduate education program administered by the combined biomedical faculty of the University of Pennsylvania. Applicants must have a Ph.D., D.V.M., or M.D. degree and should have a demonstrated record of research productivity as well as a strong potential to develop an externally funded research program. Applications will be reviewed as of 1 March 1990 and thereafter until the position is filled. Please send curriculum vitae, a statement of research interests, and the names, addresses, and telephone numbers of three referees to: **Dr. Leonard J. Bello, Chairman, Microbiology Search Committee, Department of Pathobiology, University of Pennsylvania, School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, PA 19104.** An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE OR FULL PROFESSOR DEPARTMENT OF GEOGRAPHY

Applications are invited for the position of associate or full professor in the Department of Geography, College of Natural Resources, Utah State University. Potential candidates for this tenure-track, academic year position should have a Ph.D. in geography or closely related field and an established record of scholarship in remote sensing and GIS with applications in natural resources. The successful candidate will be expected to help develop a multidisciplinary institute (center) for remote sensing and GIS, assist in the development of graduate and research programs in geography, and teach remote sensing/GIS. He/she should have demonstrated effectiveness in administration, extension experience related to land management agencies, and a willingness to engage in international cooperative efforts. Interested individuals are requested to send curriculum vitae and names of four referees to: **Cliff Craig, Chair of the Search Committee, Department of Geography, Utah State University, Logan, Utah 84322-5240.** Application deadline is 1 April 1990 or until a suitable candidate is found. *Utah State University is an Affirmative Action/Equal Opportunity and IRCA Employer.*

A professionally rewarding **SENIOR STAFF** position exists for an established, **BASIC BIOMEDICAL SCIENTIST** studying mammalian systems using modern cellular and molecular techniques, in the expanding Medical Research Institute of the Mary Imogene Bassett Hospital, a Columbia University affiliate. Ample laboratory space, generous start-up funds, and excellent salary and benefits are offered. Academic appointment to an appropriate department at Columbia University is encouraged. The institute provides a supportive, congenial environment in which the successful candidate will interact with colleagues investigating significant biomedical problems relating to human disease. A starting date during the summer 1990 is anticipated. Located on a lake in the scenic foothills of the Catskill Mountains in upstate New York. Cooperstown and the surrounding area offer affordable housing, good schools, and a range of cultural and outdoor activities. Applicants should submit curriculum vitae and the names of three references by 2 April 1990 to: **Dr. Estelle M. Goodell, Medical Research Institute, The Mary Imogene Bassett Hospital, One Atwell Road, Cooperstown, NY 13326-1394.**

BIOTECHNOLOGY Ph.D. to lead in developing new undergraduate program and to conduct research in biotechnology. Instructional courses include intro-level biology and electives in biotechnology related subjects. Initiation of program supported by Department of Education, MSIP Award. New instructional and research facilities and equipment available. Appointment may lead to tenure-track position. Send résumé to: **Dr. H. McGee, York College, City University of New York, Jamaica, NY 11451.** An Equal Opportunity/Affirmative Action Employer, M/F.

POSITIONS OPEN

ASSISTANT PROFESSOR IN OBSTETRICS/GYNECOLOGY. Tenure track. Minimum Ph.D. required. Experience in cellular immunology preferred. Will be expected to develop an extramurally supported independent research program, and contribute to ongoing research programs. Will be joining an expanding research unit interested in mechanisms of preterm labor, autoimmune disease in pregnancy, and recurrent pregnancy loss. Limited participation in graduate and undergraduate teaching required. Competitive start-up funds. Salary and limited support provided for 3 years. Submit curriculum vitae and three references to: **M. D. Mitchell, D.Phil., Department of Obstetrics/Gynecology, 50 North Medical Drive, Salt Lake City, UT 84132.** Applications accepted after the deadline may be accepted if no qualified candidates have applied.

Affirmative Action/Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR OF AQUATIC TOXICOLOGY. The College of Natural Resources at the University of Wisconsin in Stevens Point is seeking candidates for a tenure-track faculty position in aquatic toxicology beginning July or August 1990. The position involves teaching aquatic toxicology, pollution ecology, and algology, or a course in zooplankton. The successful candidate will be expected to advise undergraduate and graduate students and develop a research program and laboratory in aquatic toxicology. Candidates must have an earned doctorate with emphasis in aquatic toxicology/biomonitoring and strong supportive experience in aquatic ecology. The applicant should show evidence of scholarly accomplishments including grants and publications. Screening of applicants will begin 1 March 1990, and will continue until the position is filled. Send letter of interest and curriculum vitae, three letters of recommendation, and transcripts to: **Stanley W. Szczytko, College of Natural Resources, University of Wisconsin/Stevens Point, Stevens Point, WI 54481.**

ASSISTANT, ASSOCIATE, OR PROFESSOR POSITION. Department of Microbiology, The Mount Sinai School of Medicine. Applicants with strong molecular and genetic backgrounds who are interested in viral and/or cellular gene expression in animal cells are invited to apply. In particular, individuals with independent research achievements in DNA and RNA tumor viruses and oncogenes are encouraged. Applicants for these positions should send curriculum vitae, names of references, and a one-page research summary to: **Dr. Peter Palese, Department of Microbiology, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** An Equal Opportunity/Affirmative Action Employer.

INSTRUCTOR/ASSISTANT PROFESSOR. Position open immediately for instructor/assistant professor in the Department of Radiology at The University of Texas Southwestern Medical Center at Dallas. Position includes research in NMR microscopy (both imaging and spectroscopy) of experimental and human tumors. Qualifications include an M.D. or Ph.D. degree and advanced training and work experience in the biological effects of radiation and in clinical cancer research. The successful candidate should have an extensive background in pathology. Salary range \$30,000 to \$35,000. Curriculum vitae required. Contact: **Peter Antich, Ph.D., The University of Texas Southwestern Medical Center, Radiology, 5323 Harry Hines Boulevard, Dallas, TX 75235-9058.** An Equal Opportunity/Affirmative Action Institution.

COMPARATIVE PHYSIOLOGIST

Connecticut College, Department of Zoology, invites applications for a 2-year nontenure-track visiting appointment in comparative physiology at the **ASSISTANT PROFESSOR** level. Visiting faculty teach six courses per year with laboratory sections counting as courses. Responsibilities include teaching comparative physiology/invertebrate zoology (in alternate years) and human physiology and involvement in general biology and general zoology. Research involving undergraduates is encouraged. A Ph.D. is required.

Send résumé and three letters of recommendation to: **Dr. Stephen H. Loomis, Chair, Department of Zoology, Box 5496, 270 Mohegan Avenue, New London, CT 06320** by 1 March 1990. *Connecticut College is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF MEDICINE GEORGETOWN UNIVERSITY

Georgetown seeks potential candidates for its endowed chair in medicine. Applicants must have demonstrated exemplary scholarly leadership, substantial success in peer-reviewed research and teaching, an appreciation of the proper role of clinical activity in a university setting, and strong skills in academic administration. The Department of Medicine, which has several major affiliations in addition to the 535-bed university hospital, is poised for growth in scholarship. Serious candidates should forward an expression of interest and current curriculum vitae prior to 28 February 1990 to: **Donald F. Leon, M.D., Medical Director, Georgetown University Hospital, 3800 Reservoir Road, N.W., Washington, DC 20007.**

Georgetown University is an Equal Opportunity Employer.

ASSOCIATE CHIEF OF STAFF RESEARCH AND DEVELOPMENT

The American Lake Veterans Administration Medical Center (VAMC) seeks applicants for associate chief of staff (ACOS) for Research and Development to direct existing University of Washington-affiliated research program with funded projects in psychiatry, sleep research, mineral metabolism, neuroendocrinology, Alzheimer's disease, geriatric care, and oncology.

Candidates should be well-established M.D. investigators with strong administrative and managerial skills. Applicants should send letter of application and three references to: **Steven Risse, M.D., Acting ACOS for Research (151), VAMC American Lake, Tacoma, WA 98493.**

Equal Opportunity/Affirmative Action Employer.

CLINICAL EPIDEMIOLOGIST

The Department of Family and Community Medicine, University of Illinois College of Medicine at Rockford, is extending its search for a clinical epidemiologist. Appointment will be at the **ASSISTANT OR ASSOCIATE PROFESSOR** level, depending upon qualifications and experience. Candidates should have a doctorate or master's degree in epidemiology or public health. Experience in protocol development and an interest in longitudinal studies, geriatrics, and morbidity is highly desirable. For fullest consideration, submit applications prior to 1 May 1990. Applicants should submit curriculum vitae and a list of at least three references to:

**William H. Langewisch, M.D.
Chairman, Search Committee
University of Illinois
College of Medicine at Rockford
1601 Parkview Avenue
Rockford, IL 61107**

The university is an Affirmative Action/Equal Opportunity Employer.

HEADSHIP DEPARTMENT OF ORAL MEDICINE AND DIAGNOSTIC SCIENCES UNIVERSITY OF ILLINOIS AT CHICAGO

The Department of Oral Medicine and Diagnostic Sciences in the College of Dentistry of the University of Illinois at Chicago (UIC) is seeking its first head. This position affords an exciting opportunity to build a newly formed department with the mandate to design programs of academic excellence in the disciplines that relate to oral medicine. The department will be a core department in the College of Dentistry and will also develop collaborations and interactions throughout the UIC community. The department participates in undergraduate, graduate, and postgraduate teaching programs and has clinical responsibilities for oral medicine, oral diagnosis, radiology, and biopsy service. Faculty are expected to perform meritorious research.

Qualifications for the headship include an earned professional degree (D.D.S., D.M.D., and/or M.D.) and advanced training. Evidence of the ability to develop and administer an independent research program as well as demonstrated leadership potential is essential. The position is available 1 July 1990. Send nominations and applications with curriculum vitae, including names of three references, by 1 February 1990, to: **Dr. Donald A. Chambers, Chair, Search Committee for Headship, Oral Medicine and Diagnostic Sciences, College of Dentistry, M/C 860, University of Illinois at Chicago, Box 6998, Chicago, IL 60680.** *The University of Illinois is an Equal Opportunity Employer.*

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
NATIONAL CANCER INSTITUTE

A Senior Executive Service Vacancy

ASSOCIATE DIRECTOR

Cancer Prevention Research Program Division Of Cancer Prevention And Control

Location: Rockville, Maryland

The Associate Director, Cancer Prevention Research Program, will be responsible for the overall planning, coordination and monitoring of a worldwide Cancer Prevention Program designed to provide prompt evaluation of new leads in cancer prevention. The Cancer Prevention Research Program has a staff of approximately 46 who administer a large intramural and extramural program with a budget of approximately \$36 million annually.

This is a Civil Service position in the Senior Executive Service (SES) with an annual salary compensation between ES-1 through ES-4 (currently \$68,700 to \$76,400 per annum). 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 Medical Officer, GS-602. 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. Dolores Guido in the Personnel Management Branch, NCI, at (301) 496-8182.

Applications for Federal Employment (SF-171), are to be sent to the above individual at:

**The National Cancer Institute
Personnel Management Branch
9000 Rockville Pike
Building 31, Room 3A19
Bethesda, Maryland 20892**



A current curriculum vitae and bibliography must 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 above address.

Applications must be received by February 2, 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 HANDICAP, AGE, OR MEMBERSHIP OR NON-MEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

BIOTECHNOLOGY RESEARCH AND DEVELOPMENT

Expand your career at Codon, a privately held biotechnology company that develops and manufactures pharmaceutical proteins. We offer a stimulating, intellectual environment and challenging projects. We currently have the following positions available:

PROCESS DEVELOPMENT SCIENTIST

You will be responsible for development and characterization of recovery and purification processes for pharmaceutical proteins derived from recombinant fermentation or cell culture. Requires intimate knowledge of protein chemistry and biochemical separation methods. A Ph.D. in Chemistry/Biochemistry with experience in protein characterization and cGMP desirable.

PROCESS DEVELOPMENT ASSOCIATE

You will participate in downstream process development and biochemical characterization of pharmaceutical proteins. You should possess a BS/MS and preferably 2 years of experience in protein purification/characterization.

ASSOCIATE DIRECTOR PRODUCT DEVELOPMENT

Working closely with Process Development, Clinical Production and Regulatory Affairs, you will coordinate a number of key tasks toward pharmaceutical protein manufacture. Requires a Ph.D. in (Bio)Chemistry or Biochem. Eng. and a minimum of 4-5 years industrial experience in protein product development. A working knowledge of cGMP is required, and previous exposure to regulatory agencies (FDA/USDA) is desirable.

ASSOCIATE SCIENTIST/ RESEARCH ASSOCIATE

Positions available in our Analytical Development Department for separation and characterization of proteins and other biomolecules. BS/MS with working experience (2 years or more) with HPLC and other relevant methods required.

RESEARCH SCIENTIST

Our Analytical Development Department has a position available for an MS/Ph.D. (Biochem/Immunology) with 3-5 years experience in the development of immunoassays, chemical modification of proteins and production and purification of antibodies. Tissue culture experience is desirable.

To find out how you may fit into any of the available positions above, please send your resume and letter indicating position of interest to: Codon, Human Resources, 213 East Grand Avenue, South San Francisco, CA 94080. We are an equal opportunity employer.

CODON

POSITIONS OPEN

ASSISTANT PROFESSOR, nontenure-track, in surgery and medical microbiology and immunology, for a Ph.D. with postdoctoral experience in immunology and tissue culture. Experience in tumor immunology is preferable. Current work focuses on immunology of melanoma with potential toward LAK cell therapy. The successful applicant will be expected to obtain extramural laboratory support and participate in resident education.

To apply, send curriculum vitae, summary of appropriate past experience, and names of five references to: **D. G. Reynolds, Ph.D., Director of Research, Department of Surgery (Box 16), University of South Florida College of Medicine, Tampa, FL 33612.** Application deadline is 15 March 1990. *The University of South Florida is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE DEAN FOR ACADEMIC PROGRAMS COLLEGE OF AGRICULTURE IOWA STATE UNIVERSITY

Qualifications: an earned doctorate in a discipline associated with agriculture and/or the biological sciences with record of teaching and advising excellence. Candidates should submit a letter of application including comments reflecting academic and administrative philosophy, curriculum vitae, and names of five references to: **Dr. S. A. Ewing, Chair, College of Agriculture Associate Dean Search Committee, 124 Curtiss Hall, Iowa State University, Ames, IA 50011.** Telephone: 515-294-2160. Application deadline is 15 February 1990 or until position is filled. *Affirmative Action/Equal Opportunity Employer. Women, minorities, and members of other protected classes are encouraged to apply.*

SCIENTIFIC DIRECTOR NEOTROPICAL BIODIVERSITY PROGRAM NATIONAL MUSEUM OF NATURAL HISTORY (NMNH) SMITHSONIAN INSTITUTION (SI)

The National Museum of Natural History seeks a highly qualified candidate to plan and direct the museum's Neotropical Biodiversity Program currently operating in Peru, Bolivia, and Brazil. Candidates having a Ph.D. or equivalent experience in systematic botany or zoology, ecology, or other related field in biology will be considered. Required are evidence of scientific research experience, including work in the tropics, and experience as an administrator of a scientific organization or program. Also required is competency in spoken and written Spanish or spoken and written Portuguese. Preference will be given to those showing evidence of experience in neotropical biodiversity research. The incumbent will function as a highly visible representative of the NMNH and the SI in the field of biodiversity nationally and internationally, and the incumbent will interact with governmental and scientific staff at the highest levels in the host countries to develop and foster host-country relationships. Salary range: GM-14 (\$50,342 to \$65,444) to GM-15 (\$59,216 to \$76,982), depending on qualifications.

To apply: send Form SF-171 (Personal Qualifications Statement), curriculum vitae, description of research and career goals, and list of publications (reprints are not requested at this time), and arrange for three reference letters to be sent directly to the address below, all to be received by 1 March 1990. **Office of Personnel Administration, Branch 1 (MPA-90-1015), P.O. Box 23762, Washington, DC 20026-3762.**

SI is an Equal Opportunity Employer.

ENVIRONMENTAL SCIENCE AND TECHNOLOGY. Tenure track. Physical science, physical geography, science and society, relationship of physics and biology. Feminist/minority approaches welcome. Contribute to undergraduate interdisciplinary discovery-oriented teaching, assist program grant proposals. Commitment to team-teaching, including students in research; cooperation in residential learning; Ph.D. required. Research facilities, graduate environmental programs in biological and earth sciences, Institute of Environmental Science available. Start 17 August 1990. *Minorities and women especially encouraged, and all other qualified candidates.* Send letter of interest, résumé, and three references to: **George J. Stein, Interdisciplinary Studies, Miami University, Oxford, OH 45056.** Review begins 15 February 1990, continues until filled. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

DEAN COLLEGE OF LIBERAL ARTS AND SCIENCES ARIZONA STATE UNIVERSITY

Applications and nominations are invited for the position of dean of the College of Liberal Arts and Sciences at Arizona State University. The college consists of 22 departments and 6 research centers representing the humanities, social sciences, and natural sciences. The total budget exceeds \$40 million; externally funded research expenditures last year exceeded \$20 million.

The dean reports directly to the provost. Administrative responsibilities include budget and planning, personnel decisions, faculty and research development, and the improvement and development of instructional programs.

Candidates should have (i) an academic record that merits appointment as a professor with tenure, (ii) relevant administrative experience preferably in a major research university, (iii) a demonstrated commitment to enhancing diversity of faculty, students, and staff, (iv) a strong commitment to quality undergraduate and graduate instruction, (v) a demonstrated commitment to excellence in research, and (vi) demonstrated understanding of research, instructional, and service needs of the diverse disciplines throughout the college.

Nominations and applications (including curriculum vitae, a letter of interest, and names, addresses, and phone numbers of three references who are qualified to comment on scholarship, teaching, and administrative ability) should be addressed to:

**Brian L. Foster, Chair
Search Committee, Dean of Liberal Arts and Sciences
Office of the Provost
Arizona State University
Tempe, AZ 85287-2803
Telephone: 602-965-7279**

Application deadline is 15 February 1990. Applications and nominations will be accepted after the deadline; applications will be reviewed on a biweekly cycle as necessary until the position is filled. Preferred starting date is 1 July 1990, but date is negotiable.

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

EXECUTIVE DIRECTOR CLINICAL AND LABORATORY SAFETY

The University of Texas Health Science Center at Houston (UTHSC-H) invites applications for the position of executive director of the Department of Clinical and Laboratory Safety. The department is a component of the Office of the Vice President for Scientific Affairs. The director reports directly to this office. The incumbent will be responsible for supervising two operating divisions within the department: Chemical and Biological Safety Division and Radiation Safety Division. These divisions are the "monitoring and effector" arms of the faculty committees which develop and recommend policies and standards to the UTHSC-H president. Applicants should have formal postgraduate training in a relevant field and a minimum of 5 years of comparable experience; other combinations of education and experience will also be considered. Evidence of experience in the management of a multifaceted safety department, preferably at an academic biomedical research institution, and evidence of active involvement in the safety profession in terms of professional memberships, publications, invited talks, etc., will be very favorable. Send résumés to: **Bob G. Davis, Assistant Vice President for Scientific Affairs, The University of Texas Health Science Center at Houston, GSB S116, P.O. Box 20334, Houston, TX 77225.**

ELECTRON MICROSCOPIST, RESEARCH ASSISTANT PROFESSOR. The Pittsburgh Cancer Institute (PCI), University of Pittsburgh, seeks an individual with a strong background in contemporary morphological techniques with emphasis in electron microscopy. Using the facilities of the Core Electron Microscope Facility of the School of Medicine, the individual will provide scientific leadership for the development of morphological approaches in the research programs of the PCI. These interactions are expected to lead to an independent research program. Please send complete curriculum vitae and names of three references to: **Dr. C. G. Widnell, 868 Scaife Hall, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DIRECTOR OF CONSERVATION SCIENCE PROGRAM

World Wildlife Fund (WWF) intends to hire a director of the conservation science program which seeks to answer critical problems in conservation science and to influence science policy based on the experience of field-based projects. A leading international membership group, WWF works to preserve the biological diversity, abundance, and health of ecological systems.

Broad vision and extensive experience in the application of biological sciences to biodiversity conservation in the tropics and strong record of achievement in tropical biology required. Candidates must be able to demonstrate ability to participate in an interdisciplinary, team approach to program planning and possess excellent communication skills, both oral and written, as well as an advanced degree in the biological sciences or a related field.

Forward résumé to: **World Wildlife Fund, Personnel Department 7F, 1250 24th Street, N.W., Washington, DC 20037.** Salary and benefits appropriate to U.S. nonprofit sector. *Equal Opportunity Employer.* Please respond by 26 February 1990.

DIRECTOR MAGNETIC RESONANCE (MR) RESEARCH

The University of Pittsburgh Department of Radiology is seeking a director of MR research. The candidate must have substantial experience in MR imaging and/or MR spectroscopy with a record of successfully funded research; administrative experience is desirable. The director will supervise and coordinate MR research activities performed on a variety of mid- and high-field imaging and spectroscopy units, and will be an integral part of a large multidisciplinary research effort. The faculty appointment will be within the Department of Radiology, but joint or secondary appointments are encouraged as appropriate. The successful candidate will direct a large and rapidly expanding MR research program with an eager clinical staff interested in MR research. Faculty rank is expected to be at the **ASSOCIATE OR FULL PROFESSOR** level according to qualifications; salary and fringe benefits are very competitive. Curriculum vitae should be sent to: **Michael P. Federle, M.D., Department of Diagnostic Radiology, Presbyterian-University Hospital, DeSoto at O'Hara Streets, Pittsburgh, PA 15213.** *University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

DEVELOPMENTAL/CELL/ MOLECULAR BIOLOGIST

ASSISTANT PROFESSOR. The Department of Zoology invites applications for a tenure-track position in developmental/cell/molecular biology for August 1990. Applications are encouraged from individuals using contemporary techniques directed toward understanding fundamental issues in cell and/or developmental biology. Our faculty participate in campus-wide training programs in developmental biology, cell/molecular biology, neurobiology, and endocrinology/reproductive biology. Candidates should hold a Ph.D. degree, have two or more years of postdoctoral experience, and have a demonstrated ability to carry out independent research. The successful candidate is expected to direct an independent, extramurally funded research program and to teach in cellular/molecular/developmental biology at the graduate and undergraduate levels. Applicants should submit by 15 March 1990: curriculum vitae, statement of research interests, statement of teaching interests, and three letters of recommendation to: **Developmental/Cell/Molecular Biology Search Committee, University of Wisconsin-Madison, Department of Zoology, Zoology Research Building, 1117 West Johnson Street, Madison, WI 53706.** *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Applications are especially encouraged from women and minorities.*

ECOLOGIST/ORNITHOLOGIST. Assistant professor, Ph.D. A tenure-track position beginning fall 1990 contingent upon funding. Primary duties involve teaching courses in ecology, ornithology, and related areas. The successful candidate will have a strong commitment to undergraduate education and establish a research program that involves M.S. graduate students. Please submit curriculum vitae, statement of research interests, and three letters of reference by 28 February 1990 to: **Dr. Kipp Kruse, Department of Zoology, Eastern Illinois University, Charleston, IL 61920.** *Women and minorities are encouraged to apply.*



INTERDISCIPLINARY SCIENTISTS IN OCEAN & ICE RESEARCH

The Oceanography Group of the Jet Propulsion Laboratory (JPL) of the California Institute of Technology is recruiting scientists to initiate and lead new interdisciplinary research programs for the study of the ocean's role in global environmental changes. The JPL Oceanography Group is already a leader in interdisciplinary research involving the analyses and interpretation of data from a variety of past and present satellite missions. The new positions described below are intended to enhance these strengths and help establish JPL as a center that will play a leading scientific role in studies of the interactions between the many components of the climate and biochemical systems.

Physical Ocean Modeler: To develop and lead research programs directed at developing new techniques for assimilating satellite data and their derived products into numerical models of ocean circulation. This research will enhance ongoing JPL activities aimed at improving our understanding of important climate issues, such as the roles of ocean circulation and air-sea interaction in large-scale oceanic heat transport and sea surface temperature variations, and the influence of the oceans on variations, of CO₂ in the atmosphere.

Biological Ocean Modeler: To develop models of biological processes in the ocean and their coupling with physical processes. Improvements in biological modeling techniques will be required to incorporate satellite data into models to achieve the level of understanding of phytoplankton dynamics necessary to assess its role in the global carbon cycle and the CO₂ problem.

Precipitation and Radiative Forcing of the Ocean: To conduct research directed at how to use satellite data more effectively in computing ocean surface rainfall and radiative flux. These results are needed to improve our understanding of the large-scale thermal and buoyancy forcings of the ocean, and their influence on climate variability.

Polar Ice Research: To conduct research to improve our understanding of how the polar oceans influence large-scale climate conditions. The various presently available satellite-derived data sets, as well as those planned over the coming decade, are expected to expand the research possibilities for these types of studies.

Research scientists ranging from new PhDs to well-established senior researchers are encouraged to apply. For additional information, please call Dr. Lee-Leung Fu, Chairman of the Search Committee, at (818) 354-8167. The deadline for applications is February 26. Send applications with the names and addresses of three references to:

Professional Staffing
Department T-52
Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive 249/104
Pasadena, CA 91109
Equal Opportunity Employer M/F/H/V

Neuroscience Biochemical Pharmacologist

Join the Du Pont team! Our Neuroscience group in the Medical Products Department has an exciting, challenging opportunity for a Neuroscience Biochemical Pharmacologist. The successful candidate will conceive and implement research projects for the discovery of Novel Therapeutic Agents in areas of Anti-psychotics, Analgesics, and/or Cognitive Enhancers.

To qualify candidates must have a Ph.D. degree in Pharmacology, Biochemistry, or Neuroscience with at least two years of post-doctoral training in related areas.

You will find a highly stimulating scientific environment in a modern research facility located near Wilmington, Delaware. We offer excellent compensation and benefits, including relocation assistance. Our Mid-Atlantic location offers an attractive life-style with easy access to a wide range of academic, cultural, and recreational activities. Interested candidates should send their resumes and references to Professional Staffing, Employee Relations, Room X-51864, Du Pont Company, Wilmington, Delaware 19898.



An Equal Opportunity Employer M/F/H/V
U.S. Citizenship or Permanent Visa Required
and meet other appropriate IRCA requirements

The Swiss Federal Institute of Technology in Zurich invites applications for the position of a

Professor for Resources and Waste Management

The duties of the new professor will include teaching, research and consultancy in the field of environmentally appropriate waste management. The research should be directed to new strategies for the supply, recycling and disposal of material resources, and the technical realization of such proposals. The teaching will be particularly concerned with courses for environmental scientists and environmental engineers.

Candidates must give evidence of academic experience (for instance in chemistry, physical chemistry, chemical and process engineering or other branches of engineering), achievement in the field of environmental research and its application, and of teamwork in cooperation with engineers, natural scientists and economists.

Applications with curriculum vitae and a list of publications should be submitted no later than April 15, 1990, to the President of the ETH Zurich, Prof. Hans Bühlmann, ETH-Zentrum, CH-8092 Zurich.

B iologist

One of the foremost French pharmaceutical laboratories is recruiting a specialist for its drug research centre in the Paris region

OSTEOPOROSIS.. INFLAMMATION... PAIN

The successful candidate will specialise in rheumatoid disorders and bone metabolism; the task will be to design, develop and run experimental models which lead to the discovery of novel drug therapies.

A doctorate or PhD is essential; experience in the pharmaceutical industry would be a strong advantage.

Please send a handwritten letter of application, and CV to Media-System, 6 impasse des Deux-Cousins, 75849 Paris Cedex 17, France.

Please quote reference 68102 on the envelope.

CLINICAL IMMUNOLOGIST

Outstanding opportunity for a well-trained, highly-motivated clinical investigator to join a team of medical and basic scientists based in an NIH, ASC-supported Human Immunology and Cancer Program, Department of Medicine, University of Tennessee Medical Center at Knoxville (UTMC/K). Major responsibilities include active participation in patient care with clinical and research emphasis on B and T-cell autoimmune and neoplastic diseases. The successful candidate will work in well-equipped, state-of-the-art research facilities that include hybridoma/Mab, flow cytometry, protein chemistry, immunochemistry, molecular biology and computer laboratories. BC/BE and eligibility to state licensure required. Position requires a minimum of 3 to 5 years of postdoctoral clinical and research experience and ability to conduct innovative research involving molecular/cellular immunology. Tenure track position available immediately. Excellent compensation (including fringe benefits) and academic rank commensurate with education and experience. The Knoxville area offers the scientific resources of the University of Tennessee and the Oak Ridge National Laboratory; recreational opportunities provided by the surrounding Great Smokey and Cumberland Mountains and extensive TVA lake system; and cultural amenities including a symphony and chamber orchestra, a major fine arts museum, opera and theatre. Letter of application, CV, and names and addresses of 3 reference sources should be sent to:

Alan Solomon, MD

Professor of Medicine and Head
Human Immunology and Cancer Program



THE UNIVERSITY OF TENNESSEE
Medical Center at Knoxville

1924 ALCOA HIGHWAY
KNOXVILLE, TENNESSEE 37920

The University of Tennessee is an Affirmative Action/Title IX/Section 504 employer

DEAN COLLEGE OF GRADUATE STUDIES

The Medical University of South Carolina, an expanding health science campus, invites applications and nominations for the position of Dean of the College of Graduate Studies.

The Dean will report to the Vice President for Academic Affairs and will be responsible for the quality and development of all aspects of graduate degree programs involving research training. Responsibilities include:

Developing creative recruitment programs for augmenting the quality and number of graduate students.

Participating in the university-wide recruitment of 70 new investigators.

Providing leadership for the development of new research training programs.

Coordinating graduate research training programs with the activities and goals of the five other colleges and centers at the Medical University.

Maximizing financial resources for predoctoral and postdoctoral training and providing leadership in the use of these resources for the advancement of academic excellence on campus.

Candidates for the position must have a Ph.D. or equivalent doctoral degree, a strong background in research and graduate education, and a commitment to academic excellence.

Nominations and applications, including a curriculum vitae, should be sent by March 15, 1990 to:

Jim D. Karam, Ph.D., Chairman
Search Committee for Dean of the
College of Graduate Studies
Department of Biochemistry and Molecular Biology
Medical University of South Carolina
171 Ashley Avenue
Charleston, South Carolina 29425

The Medical University of South Carolina is an equal opportunity, affirmative action employer.

BIOTECHNOLOGY

DIRECTOR OF TOXICOLOGY, RESEARCH & DEVELOPMENT

Cetus Corporation, a leader in biotechnology, is seeking an accomplished, highly motivated leader in toxicology to direct scientists and technical staff involved in the research and development of novel biotechnology products.

You must possess a doctorate in Toxicology/Pathology or related discipline and have 5+ years of experience in the pharmaceutical industry, including hands-on experience conducting and supervising regulatory toxicology work as well as managerial experience. You must also be strong scientifically, as evidenced by extensive and significant contributions to the literature. Experience in the areas of safety assessment, pathology, reproductive toxicology, veterinary medicine, physiological toxicology and carcinogenicity is highly desirable. Experience with immunological products, especially recombinant biological response modifiers and antibodies is also highly desirable. In addition, experience with the FDA is essential. Board certification in Toxicology or Pathology is also desirable.

Cetus provides an outstanding opportunity for professional recognition as well as career growth. We offer an excellent compensation and comprehensive benefits package. For consideration, please send your resume to: Cetus Corporation, Box 89066/MS, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.



ANATOMY/CELL BIOLOGY

The Department of Anatomy and Cell Biology in the Faculty of Medicine at the University of Alberta invites applications for several faculty positions. Applicants should have research expertise in cell or developmental biology, or in molecular biology as it relates to problems in cell function. Applicants should have proven records of research achievement and will be eligible for funding by the Alberta Heritage Foundation for Medical Research. Candidates should be capable of teaching graduate courses in Cell or Developmental Biology or in a medical school course in Cell Biology/Histology. Appointments will be made at all faculty levels. Rank and salary will be determined according to University of Alberta guidelines. Successful candidates will be encouraged to carry on independent research programs, but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. Deadline for receipt of applications is May 1, 1990.

The University of Alberta is committed to the principal of equity in employment but, in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Please submit a *curriculum vitae*, a summary of research interests, and the names of four referees to Dr. Richard A. Murphy, Professor and Chairman, Department of Anatomy and Cell Biology, Faculty of Medicine, University of Alberta, Edmonton, Alberta, Canada, T6G 2H7.

DIRECTOR Microchemical Core Facility San Diego State University The California State University System

The 20-campus California State University System (CSU) is establishing a state-of-the-art microchemical instrumental resource core facility that will service the university molecular life science faculty in the Departments of Chemistry and Biology as well as in ancillary academic and research units on CSU campuses across the State of California. The Microchemical Core Facility (MCF) has been created under the aegis of the CSU Program for Education and Research in Biotechnology (CSUPERB) with instrumentation of \$1.1 million from the NSF and the State. It will be a full service facility with 6-8 support personnel providing peptide and DNA sequencing, peptide and oligonucleotide synthesis, amino acid analysis, and separation services. The MCF will also be the locus of the new system-wide biocomputing facility and will be located within the Department of Chemistry and Molecular Biology Institute at San Diego State University.

Applications are invited for the directorship of the MCF which will include a 12-month, tenured or tenure-track academic position in the Department of Chemistry at SDSU. Qualified candidates should have a PhD in Biochemistry, Chemistry or Molecular Biology with a strong background in protein and DNA chemistries and prior experience in administration of a laboratory service facility.

The MCF will have service, training, and research functions. The Director will combine strong scientific credentials with entrepreneurial management tools in the effective operation of the MCF. The Director is expected to guide the development of the MCF, including assembly and direction of staff, development of methodologies for appropriate functioning of the MCF, and acquisition of instrumentation in support of research and bioanalytical instruction. The Director will also participate in the bioanalytical component of the joint PhD programs in Chemistry and Cell and Molecular Biology, maintain a strong, creative research program, and participate in biotechnological, bioanalytical and biocomputational development.

Please send curriculum vitae, a description of relevant experience and research interests, and three letters of recommendation to: Chair, CSUPERB MCF Director Search Committee, College of Sciences, San Diego State University, San Diego, CA 92182. The search will be kept open until a suitable person is identified, but applications or nominations received before March 9, 1990, will receive full consideration.

San Diego State University is an Equal Opportunity Educator and Employer and invites and encourages applications from women and minorities.

POSITIONS OPEN

DIRECTOR, CENTRAL WISCONSIN GROUNDWATER CENTER. The director will conduct activities appropriate to the center's mission of groundwater education and technical assistance to Wisconsin residents and communities. Academic staff or tenure-track faculty, depending on degree status. Teaching responsibilities in CNR possible. Ph.D. preferred, M.S. required, in groundwater science or related field, with training and/or experience in hydrogeology. For further information, contact: **Byron Shaw, CNR, University of Wisconsin, Stevens Point, WI 54481. Telephone: 715-346-3331. FAX: 715-341-0089.** Screening begins 1 February 1990 and will continue until position is filled.

ELECTRON MICROSCOPIC TECHNICIAN

Meharry Medical College seeks a technician to direct activities in its college-wide electron microscope facility. Experience in transmission and scanning electron microscopy techniques is required. Opportunity for collaborative work with investigators throughout the college is available. Salary is negotiable depending on qualifications and experience. Send curriculum vitae and information on relevant work experiences to: **Dr. James C. Story, Chairman, Department of Anatomical Sciences, Meharry Medical College, 1005 D. B. Todd Boulevard, Nashville, TN 37208. Meharry Medical College is an Affirmative Action/Equal Opportunity Employer.**

ENVIRONMENT, RESOURCES, SOCIETIES, Rutgers University. Tenure-track position, pending budgetary approval, in the Department of Human Ecology, Cook College. Applicants' research should focus on international policy dimensions of agriculture, rural development, or natural resource use and management in land use, water, forestry, fisheries, and/or energy. International, preferably Third World, experience and ability to link domestic/New Jersey and international issues. Responsibilities include undergraduate and graduate teaching and active research. Ph.D. in relevant discipline. The Department of Human Ecology is a multidisciplinary social science department concerned with social processes in the study of environmental and resource issues. Send letter of application, curriculum vitae, the addresses of references, and samples of publications by 15 March 1990 to: **Dr. Bonnie J. McCay, Chair, Search Committee, Department of Human Ecology, Cook College, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903. Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS IN MOLECULAR BIOLOGY

The Fulbright College of Arts and Sciences at the University of Arkansas, Fayetteville, invites applications for four tenure-track **ASSISTANT PROFESSOR** positions in molecular biology, available August 1990. Candidates must have a Ph.D. degree with postdoctoral experience. In addition to a strong background in one of the disciplines listed below, excellence in teaching, and the ability to establish a nationally competitive research program are required. Also, the successful candidates will be expected to serve as molecular biology resource persons for biologists campus-wide and to work cooperatively with other molecular biologists. Space for a central molecular biology facility with a support technician will be provided. Salary and start-up support are nationally competitive. Appointments will be made in the following departments: (i) Chemistry and Biochemistry, for a research specialist in site-specific mutagenesis of proteins; (ii) Botany and Microbiology, for two microbiologists with research interests in one of the following fields: molecular genetics/physiology, molecular immunology, or molecular virology; (iii) Zoology, for a research specialist in cell and molecular structure and function, including, but not limited to, motility, cell-cell interactions, receptors, and intracellular signaling (the zoology position is a continuation of the search announced in *Science*, 8 September 1989).

Please submit a letter of application (specifying which position), curriculum vitae, and statements of current and future research interests and teaching goals, and arrange to have three letters of reference sent to: **The Molecular Biology Search Committee, Fulbright College, 122 Vol Walker Hall, The University of Arkansas, Fayetteville, AR 72701.** Applications will be reviewed when complete and the searches will continue until all positions are filled. *The University of Arkansas is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) FACULTY POSITION

Massachusetts Institute of Technology seeks a **JUNIOR FACULTY MEMBER** in the broad area of biomedical engineering or biomedical physics. The appointee will have major responsibilities in the education of scientists, engineers, and physicians who expect to work at the interface of technology and medicine. The individual's research area is flexible and could range, for example, from molecular biophysics to quantitative systems physiology to innovative diagnostic or therapeutic devices. The individual should possess a doctoral degree in the physical sciences or engineering. A strong background in biological/medical sciences is required. The appointment will be made jointly between the Harvard-MIT Division of Health Sciences and Technology (HST) and an MIT department in the individual's discipline.

Qualified applicants should send a letter including a two-page statement of current or proposed research, curriculum vitae, and three letters of reference, by 1 April 1990 to:

**Professor Roger G. Mark
Co-director, HST Division
Room E25-519
Massachusetts Institute of Technology
Cambridge, MA 02139**

The letters of reference may be sent separately, but the names and addresses of referees must be included in the application.

MIT is an Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY OF CALGARY GROWTH FACTORS IN OCULAR DISEASE

The Lions' Sight Center of the University of Calgary invites applications for one or more full-time academic positions. Candidate(s) should have a Ph.D., or M.D. with equivalent research training; at least 2 years of postdoctoral experience; an established research record in cellular or molecular biology concerning the expression or action of growth factors; and a commitment to investigate the role(s) of growth factors in diabetic retinopathy, retinal degeneration, or ocular growth and myopia.

A renewable 5-year scholarship will be available upon successful application to the Alberta Heritage Foundation for Medical Research and/or the Medical Research Council of Canada. Salary and academic rank will be commensurate with experience.

The successful candidate(s) will be affiliated with the Lions' Sight Center, an appropriate academic department, and an interdisciplinary research group in the Faculty of Medicine. Collaborations will be encouraged with strong groups in diabetes, growth factors, developmental neurobiology, and retinal cell biology. At least 75% of time will be protected for research.

Please submit curriculum vitae, a statement of research interests, and the names of three references, by 15 March 1990, to:

**Dr. W. K. Stell
Director, Lions' Sight Center
The University of Calgary
3330 Hospital Drive, N.W.
Calgary, Alberta, Canada T2N 4N1**

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal people, visible minorities, and people with disabilities.

HIV/AIDS IMMUNOLOGIST, GUTHRIE FOUNDATION FOR MEDICAL RESEARCH

ASSISTANT, ASSOCIATE, OR FULL SCIENTIST (M.D. or Ph.D.) position open. New laboratory space and equipment available to develop an HIV immunology research program in an institute expanding from four to seven basic immunology labs. Programs focusing on cytotoxic cells and/or cytokines would fit well with current research programs, but other areas are also welcome. Clinical time (25%) available for M.D. in Section of Infectious Diseases, Guthrie Clinic, if desired. Candidates should submit curriculum vitae with three references and statement of interests to: **Robert E. Hall, M.D., Ph.D., Scientific Director, Guthrie Foundation For Medical Research, Guthrie Clinic/Medical Center, Sayre, PA 18840.**

POSITIONS OPEN

FACULTY POSITION

Cardiovascular/renal physiologist for entry-level position to immediately conduct and manage NASA-funded projects on cardiovascular/renal response to spaceflight in primates. Ph.D. required with strong academic record of research and publications. Send résumé and names of three references by 1 March 1990 to: **Dr. Susanne E. Churchill, Associate Director, Institute for Circadian Physiology, 677 Beacon Street, Boston, MA 02215. An Equal Opportunity Employer.**

FACULTY POSITION: TRANSPLANTATION, BIOLOGY, AND IMMUNOLOGY. Permanent track position for persons with Ph.D. and/or M.D. degrees. Involves conducting an independent research program on some aspect of transplantation, biology (such as physiology), and/or immunology with a focus toward transplantation. Candidate expected to be competent in basic immunology, to conduct an independent research program, and be willing to participate with clinicians involved in a large multi-organ transplantation program (liver, renal, pancreas, heart, lung, bone marrow). Will receive academic appointment commensurate with his/her qualifications. Start-up funds for establishment of the laboratory are available. Send curriculum vitae, a description of research interests, and names of three references to: **Dr. Keith Kelly, Chairman, Department of Surgery, Mayo Clinic, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Institution.**

RESEARCH FACULTY POSITION PHYSICAL OCEANOGRAPHY

The University of Washington School of Oceanography seeks a physical oceanographer with expertise in numerical simulation and/or theory applied to geophysical fluid dynamics in one or more research areas in physical oceanography. Interactions among physical dynamicists with the atmospheric sciences and applied mathematics groups are particularly active, as are those with tracer chemists interested in carbon cycle/global climate research. Facilities of interest to modelers include a network of Unix workstations, fast links with several national supercomputer centers, and a new (and wet) geophysical fluid dynamics laboratory.

Research faculty are encouraged to teach with a portion of their salary provided by the school. Upon promotion, research faculty have professorial status within the university, and enhanced state support. We anticipate that the appointment will be at the **ASSISTANT PROFESSOR** rank, although more senior persons may be considered.

Closing date for applications is 15 March 1990. Applications, including the names of four references, should be sent to: **Professor Arthur R. M. Nowell, Director, School of Oceanography, WB-10, University of Washington, Seattle, WA 98195. The University of Washington is an Equal Opportunity/Affirmative Action Employer.**

MEDICAL PHYSICIST

Master of Science degree in radiological physics required. Board-certified or -eligible for certification by the American Board of Radiology in radiological physics. Must be able to perform the following duties: (i) serve as a consultant to the radiation therapist in treatment planning and dosimetry; (ii) perform dosimetric calculations; (iii) calibrate radiation sources used in radiation therapy; (iv) maintain sealed source inventory, leak test, etc., relative to interstitial therapy activities as to patient, staff, and public safety; (v) assure license and regulation compliance throughout therapy activities and Radiology Department; (vi) serve as hospital radiation safety officer and as a member of the Radiation Safety Committee; (vii) aid the chief of service in matters relating to licensing, inspections, and policies as they relate to sources of ionizing radiation and occupational safety; (viii) teach in-service and courses regarding radiation physics, radiological physics, and radiation safety; and (ix) perform special projects as assigned. Hours are 8:00 a.m. to 5:00 p.m., 40 hours per week. Beginning salary is \$21.64 per hour, overtime at \$32.46 per hour. One position available. Interested applicants contact:

**The Employment Security Division
1001 Tennessee Street
Pine Bluff, AR 71611**

Must have proof of legal authority to work in the United States. Job Order #538629.



For our Research Centre in Vers-chez-les-Blanc, north of Lausanne (Switzerland) we are seeking a

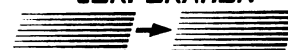
MICRO-WAVE SPECIALIST

to study warm up phenomena in micro-wave ovens linked to food composition, its form and packaging, and the kind of oven. He (she) will also be in charge of investigations on new food drying techniques in order to improve the quality of our products.

The successful candidate holds an Engineering diploma in Food Science, or has equivalent education, as well as experience in micro-wave applications and in mathematical modeling.

Please send your application with curriculum vitae to Mrs. M. Germanier Audrin, Nestlé Research Centre, Personnel Office, P.O. Box 353, CH-1800 Vevey, Switzerland.

NEUROGENETIC CORPORATION



Neurogenetic Corporation has established itself as a leader in the cloning and investigation of neurotransmitter receptors in the human brain. Our program utilizes basic research initiatives to develop new therapeutic approaches for the treatment of neurological and psychiatric illness. Career opportunities are currently available for Ph.D. scientists with postdoctoral experience in the following areas:

Molecular Biologists: Candidates should have experience in molecular cloning, mammalian cell transfections, or PCR technology.

Medicinal Chemists: Candidates should have experience in synthetic organic chemistry or the use of natural products for drug design; applications are sought at both senior (group leader) and staff scientist levels.

Neurogenetic Corporation is an equal opportunity employer located in the New York City metropolitan area. We offer a competitive salary and benefits package, relocation expenses and stock ownership. Please submit your curriculum vitae along with the names of three references to:

Human Resources Manager
Neurogenetic Corporation
215 College Road
Paramus, NJ 07652

PROFESSOR AND CHAIR DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF KENTUCKY, COLLEGE OF MEDICINE A. B. CHANDLER MEDICAL CENTER

Nominations and applications are invited for the position of Professor and Chair of the Department of Biochemistry at the University of Kentucky, College of Medicine. The department is responsible for the education of 360 medical and 31 graduate students and consists of 17 tenured and tenured-track faculty. The department is well funded and equipped. We are seeking candidates with an outstanding record of achievement in the fields of biochemistry and/or molecular biology to provide strong leadership to an excellent department. Candidates should have a doctorate in biochemistry or a related discipline, experience in academic medical center administration and a proven record of scientific excellence. Candidates should submit a curriculum vitae and the names of references by not later than February 16, 1990 to:

**Emery A. Wilson, M.D., Dean
College of Medicine
University of Kentucky
A. B. Chandler Medical Center, Room MN 140
800 Rose Street
Lexington, Kentucky 40536-0084**

The University of Kentucky is an Equal Opportunity/Affirmative Employer. Women and minorities are encouraged to apply.

DEAN College of Computer, Mathematical, and Physical Sciences UNIVERSITY OF MARYLAND, COLLEGE PARK

Applications and nominations are invited for the position of Dean of the College of Computer, Mathematical, and Physical Sciences at the University of Maryland, College Park campus. The Dean provides both academic and administrative leadership for the College and reports directly to the Vice Chancellor for Academic Affairs and Provost.

The College consists of the departments of Computer Science, Geology, Mathematics, Meteorology, and Physics and Astronomy, as well as the Applied Mathematics Program, the Center for Automation Research, the Chemical Physics Program, the Institute for Physical Science and Technology, the Institute for Advanced Computer Studies, and the Laboratory for Plasma Research. The College employs 472 faculty members and approximately 800 support personnel. Presently about 2300 undergraduate students and 800 graduate students are enrolled in degree programs within the College. In 1988-89, researchers in the College were awarded approximately \$34 million in external grants and contracts. The state-supported budget was about \$28 million.

A candidate should have an earned doctorate, be eligible for appointment in a department of the College at the rank of Professor with tenure, have successful experience as a teacher and a distinguished record of scholarly research, and have demonstrated leadership ability and management skills.

Applications should include a curriculum vitae and the names and addresses of at least four references. For best consideration, all applications should be submitted before March 1, 1990 to:

**Patrick F. Cuniff
Office of Graduate Studies & Research
2125 Lee Building
University of Maryland
College Park, Maryland 20742**

The University of Maryland is an equal opportunity, affirmative action employer. Women and minority candidates are encouraged to apply.

POSITIONS OPEN

PHYSICS FACULTY POSITIONS

The Smith College Physics Department invites application for two positions available in the fall 1990. The first is a tenure-track position in experimental physics at the **ASSOCIATE OR ASSISTANT PROFESSOR** level. The candidate should have a Ph.D., an interest in teaching, and research interests amenable to collaboration with undergraduates. Preference will be given to persons with an established experimental program. Funds are available to start or extend a research project. The second position is a 1-year appointment at the rank of entry-level **ASSISTANT PROFESSOR**. Qualifications are the same, except that the applicant need not be an experimentalist. *Women and minorities are encouraged to apply.* Located in western Massachusetts, Smith College is a leader in the education of women and has an outstanding record in the number of professional women physicists who are alumnae. The Five College Consortium, comprised of Smith, Amherst, Mt. Holyoke, and Hampshire Colleges and the University of Massachusetts, provides a rich intellectual and cultural life for faculty and students as well as additional collegial opportunities in teaching and research. Curriculum vitae, statement of teaching and research interests and experience, and three letters of reference should be sent to: **Professor Bruce Hawkins, Chair, Department of Physics, Clark Science Center, Smith College, Northampton, MA 01063.** Preference will be given to applications received before 15 February 1990. *Smith College is an Equal Opportunity/Affirmative Action Institution.*

GENETICIST, UNIVERSITY OF ARIZONA

Clinical faculty member sought in genetics at the **ASSISTANT/ASSOCIATE PROFESSOR** level, Phoenix campus. Qualifications: M.D. degree; Board certification or eligibility in pediatrics/clinical genetics. Review of applicants begins 26 January 1990 and will continue until position is filled. Contact: **Eugene Hoyme, M.D., Department of Pediatrics, Arizona Health Sciences Center, Tucson, AZ 85724.** Telephone: 602-795-5675. *University of Arizona is an Equal Opportunity/Affirmative Action Employer.*

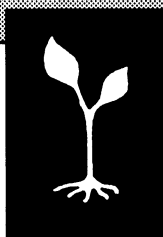
GENETICIST

The Department of Biological Sciences, University of Nevada, Las Vegas (UNLV), invites applications for a tenure-track position at rank of **ASSISTANT OR ASSOCIATE PROFESSOR**. Preference will be given to candidates with interests in the molecular genetics of eukaryotes, which will complement those of a faculty with a particular strength in environmental biology and increasing emphasis in molecular disciplines. A Ph.D. in biological sciences is required and postdoctoral training is preferred. Teaching responsibilities will include both a general genetics course for undergraduate majors and advanced or graduate level courses in the candidate's area of expertise. Development of an active externally supported research program will be expected. Institutional start-up funds will be available to augment equipment in an existing laboratory.

Send letter of application, curriculum vitae, a brief statement of research and teaching interests, reprints of representative publications, and three letters of reference to: **Dr. Charles E. Deutch, Chair, Genetics Search Committee, Department of Biological Sciences, University of Nevada, Las Vegas, Las Vegas, NV 89154** by 23 February 1990. *The University of Nevada, Las Vegas, is an Equal Opportunity/Affirmative Action Employer. UNLV employs only U.S. citizens and aliens authorized to work in the United States.*

MOLECULAR BIOLOGY/IMMUNOLOGY POSITION. RESEARCH ASSISTANT PROFESSOR or RESEARCH ASSOCIATE, depending on qualifications, at a major cancer research institute to study molecular biology of cytokine action on bone cells. Experience in recombinant DNA techniques such as library cloning, nuclear run-off, CAT assay mutagenesis, etc., is preferred. Training in immunology or bone metabolism is also desirable but not required. Excellent opportunities for collaboration with interdisciplinary research programs within the institute's research and academic environment. Salary is competitive and based on experience. Send curriculum vitae, research experience, and names of three references to: **Thomas B. Tomasi, M.D., Ph.D., Chairman, Department of Molecular Medicine and Immunology, Roswell Park Cancer Institute, Buffalo, NY 14263.** *Roswell Park is an Affirmative Action Employer.*

26 JANUARY 1990



Agricultural Biotechnology Postdoctoral Associates

CIBA-GEIGY's Agricultural Division, a leader in genetic engineering, crop improvement and crop protection chemicals, seeks candidates for two Postdoctoral Associate positions in our Agricultural Biotechnology Research Unit in Research Triangle Park. Our state-of-the-art facility is close to a major concentration of universities, businesses, research institutions and government agencies in North Carolina.

Both appointees will be part of our Tissue Culture Department working with maize. Research topics include the molecular basis of regeneration and environmental stress tolerance. Taking advantage of our excellent maize cell culture and molecular biology expertise, you will have the opportunity to collaborate with a dynamic team of scientists to develop innovative approaches to studying these topics.

In addition to a PhD in an appropriate plant science discipline, the ideal candidate will have experience in plant cell culture and background relevant to the research topics.

CIBA-GEIGY offers a competitive salary and generous company-paid benefits. Please send resume with three letters of professional reference, and reprints from any publications, in confidence, to: **Dr. Mary-Dell Chilton, CIBA-GEIGY Corporation, P.O. Box 12257, Research Triangle Park, NC 27709.** We Are An Equal Opportunity Employer M/F/H/V.

Science Serving Mankind

CIBA-GEIGY

T CELL SCIENCES, INC. is a health care company engaged in the development and marketing of therapeutic and diagnostic products. Positions at T CELL SCIENCES include a career-enhancing environment and the opportunity to work with internationally recognized scientists in converting their discoveries into products.

Research Director Molecular Biology & Biochemistry

Continued growth has created an opportunity for an M.D. or Ph.D. to manage and expand our efforts in key biopharmaceutical areas. The candidate should possess a vision of novel drug sources in biotechnology, and have had extensive industrial experience in managing senior scientists in molecular biology and biochemistry. Experience in various recombinant protein expression systems, receptor biochemistry and some areas of biology preferred. This position requires interaction with recognized world-class advisors and consultants of the Company, as well as evaluation and development of new programs. Candidates from varied backgrounds are encouraged to apply.

Group Leader/Immunobiology

Significant therapeutic research has created a position for a D.V.M., M.D. or Ph.D. with an interest to establish animal models to study immunological diseases and the use of immunoregulatory compounds for treating other disorders, such as tumors and cardiovascular diseases. The candidate will have worked with one or more of the animal models of autoimmune disorders such as lupus, arthritis, diabetes and encephalomyelitis, and will have ample knowledge of elementary surgical procedures in small mammals (mice, hamsters and rats). This position requires 3-5 years postdoctoral and supervisory experience, preferably in industry. Research will involve the testing of newly developed compounds and recombinant DNA products for treating and preventing diseases.

T CELL SCIENCES, INC. offers competitive compensation, comprehensive benefits, and the opportunity for significant career advancement. For immediate consideration please forward C.V. to Paula R. Freeman, T CELL SCIENCES, INC., 38 Sidney Street, Cambridge, MA 02139.

**T CELL
SCIENCES**

An Equal Opportunity Employer M/F/H

**HEAD
DEPARTMENT OF
ENVIRONMENTAL HEALTH
COLORADO STATE UNIVERSITY**

The Department of Environmental Health seeks a dynamic, innovative leader to exploit growth opportunities in educational offerings, research and service with 14 faculty members specializing in epidemiology (veterinary and human), toxicology, water/waste water, occupational health, biostatistics, and vector-borne diseases. Unique opportunities exist to enhance educational offerings at the doctoral or master's (63 students) and bachelor's (100 students) levels with on-campus and off-campus offerings. Growth opportunities exist in toxicology, occupational health, hazardous materials and environmental risk assessment. Applicants must possess a Ph.D., M.D., D.V.M., or equivalent; demonstrated leadership/organizational ability; and scholarly/professional achievements appropriate for appointment to full professor. Salary is negotiable. Qualified applicants from industry or government and especially women and minority group members are encouraged to apply. Send a letter of application, curriculum vitae and five references to: Dr. Rupert P. Amann, Head, Department of Physiology, Colorado State University, Fort Collins, CO 80523. Phone 303-491-6187. Applications will be accepted until March 23, 1990. Colorado State University is an equal opportunity/affirmative action employer.



**香港城市理工學院
City Polytechnic
of Hong Kong**

**TEACHING POSITIONS
IN A RAPIDLY EXPANDING INSTITUTION
IN HONG KONG**

Department: Applied Science

Posts: Principal Lecturer / Senior Lecturer / Lecturer / Assistant Lecturer

Subject Area: Applied Physics and Materials Science (several posts including one in medical physics and one in electron microscopy) / Microbiology (preferably industrial microbiology) / Industrial Chemistry / Food Science and Technology / Environmental Science (preferably environmental control or waste treatment or ecology)

Requirements for Appointment: A good honours degree, and a higher degree preferably a PhD for senior appointments. Relevant professional, including teaching and research / industrial experience.

Salary Scale: HK\$119,640 p.a. to HK\$446,040 p.a. depending on level of appointment. (Exchange Rate: US\$1 = HK\$7.803 approximately)

Terms & Conditions: Option for appointment on gratuity-bearing terms (25% on basic salary) for two years or on superannuable terms with provision for retirement benefits. Excellent fringe benefits include medical & dental schemes and long leave. Passages and housing are provided where applicable.

Application Procedure: Please send detailed resume together with names and addresses of 3 appropriate academic and professional referees to the General Secretary, City Polytechnic of Hong Kong, P.O. Box 98441 Tsim Sha Tsui Post Office, Kowloon, Hong Kong. Information regarding the Polytechnic and on posts advertised may be obtained upon request (Fax: 7889334, Telex: 45531 CPOLY HX).

SCIENTISTS

IIT Research Institute



IITRI is a renowned not-for-profit contract research and development organization. We are seeking Ph.D. level scientists to conduct research in our Life Sciences Department.

RESEARCH BIOCHEMISTS/PHARMACOLOGISTS: Conduct research with interdisciplinary teams in cancer chemoprevention/carcinogenesis, and toxicology. Postdoctoral experience in one or more of the following areas is desirable: eicosanoid analysis, tissue distribution, pharmacokinetics, metabolism studies, and/or lipid biochemistry. Development of research program in area of expertise encouraged. **Direct resume to: Dept. #S/RBP.**

TOXICOLOGIST/PHARMACOLOGIST: Advanced degree and 2-4 years of industrial or postdoctoral experience. Responsibilities include Study Director functions for regulatory toxicology studies; the design and conduct of studies to evaluate xenobiotic bioavailability and disposition (i.e., ADME) following various routes of exposure; preparation of research proposals, reports and publications; and supervision of technical staff. Must have in vivo toxicology and drug metabolism experience as well as a demonstrated comprehension of analytical methodologies. A solid background in fundamental toxicology is essential. Familiarity with GLP regulations, in vitro research techniques and pharmacokinetics is desirable. **Direct resume to: Dept. #S/TPO.**

INHALATION TOXICOLOGIST: Advanced degree in toxicology; strong chemistry background preferred, and 2-3 years of experience. Assume responsibilities as Study Director for acute, subchronic and chronic inhalation toxicology studies. Responsibilities include participation in design, supervision and conduct of experiments, preparation of protocols and SOPs, scheduling of studies, interpretation and evaluation of results, and report writing. **Direct resume to: Dept. #S/ITO.**

MICROBIOLOGIST: Advanced degree in microbiology and/or immunology and 0-3 years of experience. You will join a team of investigators studying pathophysiological immunologic responses in experimental animals. Responsibilities will include participation in ongoing research grants and contracts; preparation of research proposals, reports and publications; and supervision of junior technical staff. **Direct resume to: Dept. #S/MIC.**

MOLECULAR BIOLOGIST OR MOLECULAR PHARMACOLOGIST: Candidate should have at least 2 years postdoctoral experience and a strong interest in the areas of carcinogenesis and cancer chemoprevention. Participate in an ongoing program in cellular biology, retinoids, growth factors and hormones as related to mammary cancer. Candidate will also be encouraged to develop a research program in area of interest. **Direct resume to: Dept. #S/MBP.**

NUTRITION AND/OR CARCINOGENESIS: Conduct research with interdisciplinary team in cancer chemoprevention and carcinogenesis. Postdoctoral experience highly desirable. Development of research program in area of expertise encouraged. **Direct resume to: Dept. #S/NUC.**

MANAGER, QUALITY ASSURANCE: Applicants should have a minimum of a B.S. degree in chemistry or biology and 3-5 years experience in GLPs and QA related to toxicological and chemical studies for EPA and FDA under TSCA, FIFRA, etc. Must have a good understanding of present regulatory issues and excellent verbal and written communication skills since responsibilities involve several departments and extensive client contact. Supervisory experience is a plus. **Direct resume to: Dept. #S/MQA.**

IITRI provides a competitive compensation/benefits portfolio. Submit resume with salary specifics in confidence to: **Ms. L. Amft, IIT Research Institute, 10 West 35th Street, Chicago, IL 60616.** An Equal Opportunity/Affirmative Action Employer.



University Of Missouri-Kansas City Dean, Graduate Faculties and Research

Nominations and applications are invited for the position of dean of the Graduate Faculties and Research at the University of Missouri-Kansas City.

The University of Missouri-Kansas City, one of four campuses of the University of Missouri System, has an enrollment of approximately 12,000 students, of whom 10% are professional students and 30% are master's or doctoral students. UMKC includes the schools of Basic Life Sciences, Dentistry, Education, Law, Medicine, Nursing, Pharmacy, the College of Arts and Sciences, the Conservatory of Music, the Computer Science Telecommunications Program and a cooperative engineering program with the University of Missouri-Columbia. All schools, the Conservatory and the College offer graduate or professional study.

UMKC is the only comprehensive university in the Kansas City metropolitan area. With a population of 1,500,000, the metropolitan area has a diverse economic base. The city is known for its quality of life and an array of arts and professional sports. The main campus is located in a residential area.

The person to fill this position will lead with vision and creativity the development of research and graduate programs at the University of Missouri-Kansas City and should possess the following qualities:

- A record of outstanding research, nationally recognized
- A background of successful administrative leadership in graduate education, including doctoral programs
- Demonstrated ability to secure funding for research and graduate education
- Sensitivity toward and ability to deal with students, faculty, government and the community
- Commitment to affirmative action in graduate education/research

Responsibilities Include:

- Strategic planning for research and graduate studies
- Facilitation and oversight of faculty and student research and scholarly activity
- Administration of graduate education
- Leadership in development of interdisciplinary Ph.D. programs
- Liaison with business and community leaders
- Identification and development of research support
- Negotiation with agencies and foundations

Nominations and applications may be sent to the address below. Each candidate is asked to submit a letter of application, a current curriculum vitae, and the names, addresses and telephone numbers of three references.

Dr. Linda E. Voigts, Chair, Search Committee
Dean, Graduate Faculties and Research
% Office of Academic Affairs
University of Missouri-Kansas City
Kansas City, Missouri 64110-2499

A review of applications will begin March 1, 1990.

The University of Missouri is an equal opportunity, affirmative action employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

HYDROGEOLOGIST. For firm in northeastern Ohio. Participation, as a professional member of the investigation team, in geologic and hydrogeologic investigations on surface and groundwater contamination problems arising from such causes as hazardous chemical spills and groundwater pollution from landfills. Involves supervision of field operational projects, including sampling (surface and subsurface water, soil, and hazardous and industrial wastes) as well as geologic mapping and surveying, the principal instruments used being the electrol microprobe and the photo-ionization detector. Also responsible for interpreting and evaluating the results of gas chromatography/mass spectrometer (GC/MS) analytical reports, and preparation of portions of hydrogeologic reports based upon computerized study of the sampling data. Additionally, performs literature searches to identify new techniques which promise to be used in hydrogeological analysis. Job involves extensive travel (approximately 75% of time) for field projects in Ohio, Pennsylvania, Kentucky, and Michigan. Must have B.S. in hydrogeology and academic program must have included one graduate level course each in: sedimentary petrology, exploration geophysics, ore microscopy, petrochemistry, and hydrology and water resource evaluation. Must have 1 year of experience in hydrology. Must have ability, either from academic studies or work experience, to supervise soil borings and monitor well installation. Must have had a recent physical examination, including spirometer. Forty hours per week, 8 a.m. to 5 p.m., Monday to Friday; \$23,675 per year. Must have proof of legal authority to work permanently in United States. Send résumé and course transcript in duplicate (no calls) to: **C. Bussard, JO# 1237005, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

MOLECULAR IMMUNOLOGIST POSITION

DHHS/PHS Food and Drug Administration (FDA), Center for Devices and Radiological Health (CDRH), invites applications for position of molecular immunologist, GS-12/13/14/15, located in Rockville, Maryland. This position is in the Division of Life Sciences and requires that one organize and direct intra- and extramural research programs in molecular immunology and serve as the program's lead scientist. The duties and responsibilities of the position include but are not limited to designing experiments oriented to support the evaluation of the safety and effectiveness of in vitro diagnostic devices based on new immunological principles. A Ph.D. degree or equivalent in immunology is required with demonstrated research experience and knowledge of molecular biology techniques including recombinant DNA technology and monoclonal antibody techniques. Appointment may be at the GS-12 through GS-15 level depending on the experience and qualifications of the candidate, with a salary range from \$35,825 to \$76,982 per annum. Qualified candidates may also be appointed through the Commissioned Corps system in the U.S. Public Health Service. Please send curriculum vitae, résumé, or SF-171, and reprints of a few representative publications to: **Jose-Luis Sagripanti, D.Sc., Acting Branch Chief, Molecular Biology Branch, FDA, Center for Devices and Radiological Health (HFZ-113), 12709 Twinbrook Parkway, Rockville, MD 20857. Telephone: 301-443-7153.** U.S. citizenship is required.

The FDA is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available for studies involving the interaction of TGF β , retinoids, and nuclear retinoic acid receptors in the control of epithelial cell growth and differentiation. Experience in cell culture and molecular biology desired. Send curriculum vitae and names of three references to: **Dr. Richard M. Niles, Department of Biochemistry, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. Available immediately for an individual interested in using molecular biological techniques and transgenic models to study various aspects of host defense to bacterial pathogens. Send curriculum vitae and names of three references to: **David Niesel, Ph.D., Department of Microbiology J-19, The University of Texas Medical Branch (UTMB), Galveston, TX 77550.** *UTMB is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.*

POSITIONS OPEN

PHARMACOLOGIST

The Department of Pharmacology, Dalhousie University, invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Applicants should have a Ph.D. or equivalent degree plus some postdoctoral experience. Successful candidates will be expected to participate in undergraduate and graduate teaching and to maintain an independent research program. Applicants in all fields of pharmacology or related areas are encouraged to apply. Curriculum vitae, a brief statement of research interests, and three letters of reference (direct from referees) should be sent to: **Dr. Kenneth W. Renton, Professor and Head, Department of Pharmacology, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H7.** *Dalhousie University is an Equal Opportunity/Affirmative Action Employer. In accordance with Canadian immigration regulations, this advertisement is directed in the first instance to Canadian citizens and permanent residents of Canada.*

POSTDOCTORAL POSITION. Available to study mechanisms of signal-response coupling regulating plasminogen activator production in human endothelial cells. Research includes identification of protein kinases and their substrates. Experience in cell biology and biochemistry is essential. Send curriculum vitae and the names of three references to: **Dr. Eugene G. Levin, Department of Molecular and Experimental Medicine, BCR-5, Scripps Clinic and Research Foundation, 10666 North Torrey Pines Road, La Jolla, CA 92037.** *Equal Opportunity/Affirmative Action Employer, M/F/H.*

POSTDOCTORAL POSITION IN IMMUNOLOGY. To study mechanisms of induction and maintenance of tolerance in T lymphocytes. Focus on molecular events responsible for clonal energy in both naive and cloned T cells. Second position available to study tolerance mechanisms in autoimmune disease (EAE). Recent Ph.D. in immunology, biochemistry, or molecular biology preferred. Send curriculum vitae and names of three references to: **Dr. Helen Quill, University of Pennsylvania, School of Medicine, Department of Pathology, Philadelphia, PA 19104-6082.** *Equal Opportunity/Affirmative Action Employer.*

SYMBIOSIS CELL BIOLOGY

POSTDOCTORAL POSITION available for investigation of temperature-induced exocytosis of symbiotic algae from marine cnidarians. Background in cell biology (immunocytochemistry, signal transduction) desirable. Send curriculum vitae, statement of research interests, and names of three referees to: **Dr. L. Muscatine, Department of Biology, University of California, Los Angeles, CA 90024.**

POSTDOCTORAL POSITION available now to study DNA packaging, viral assembly, and molecular biology. Current work includes megacosmid development combining T4 packaging system with P1 and DNA vectors for human genome mapping, mechanism of packaging, and construction of packaging protease-gene fusion vector system [*Annu. Rev. Microbiol.* 43, 267 (1989)]. Salary: \$25,000 or commensurate with experience provided by NIH Merit Award. Applicants should have, or expect to receive, a Ph.D., and preferably experience in biochemistry, molecular biology, or electron microscopy. Send curriculum vitae and names of three references to: **Dr. Lindsay W. Black, Department of Biochemistry, University of Maryland Medical School, Baltimore, MD 21201.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSOCIATE

Postdoctoral position available in June 1990 to study nerve growth factor receptor (NGFR) and differentiation in neural cell lines. Current work includes the preparation of recombinant NGFR in the baculovirus system, the measurement of NGFR lateral diffusion and aggregation by fluorescence recovery, the elucidation of the cytoskeletal linkage of the NGFR, and the role of oncogenes in regulating differentiation of neuroblastoma cell lines. Experience in protein chemistry, DNA technology, or cell culture desirable. Support available in NIH scale. Submit curriculum vitae and three letters of recommendation to: **Dr. Alonzo H. Ross, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545.** *An Equal Opportunity/Affirmative Action Employer, M/F/H.*

Information Scientist/ Literature Searcher

The Agricultural Research Division of American Cyanamid Company seeks an individual with a strong background in animal science, veterinary medicine, or zoology, and knowledge of information resources in biology. The position provides opportunities to work at the forefront of veterinary science and animal production, supporting and interacting with an active R&D staff in an intellectually stimulating environment.

The successful candidate will have an advanced degree in animal science, agricultural science, veterinary medicine, or zoology with a minimum of three years' experience in an industrial position or clinical practice. Excellent written and verbal communication skills are essential. Experience in literature searching using manual and on-line bibliographic retrieval systems is highly desirable.

American Cyanamid offers an excellent compensation and benefits package and a convenient location midway between New York City and Philadelphia. Qualified candidates please send your resume, in confidence, to: Judith C. Leondar, Manager, Technical Information Services,



American Cyanamid Company
Agricultural Research Division
P.O. Box 400
Princeton, NJ 08543-0400.

An Equal Opportunity Employer M/F/H/V.
No Agencies Please.

POST-DOCTORAL SCIENTIST MOLECULAR BIOLOGY

Amgen is a leader in the discovery and development of innovative human therapeutic and diagnostic products through applied biotechnology. Our continued growth has offered us the opportunity to establish a post-doctoral position in the human diagnostics group in Boulder, Colorado for cDNA cloning and expression of human cell surface receptors.

Qualified applicants must have a Ph.D. in a relevant discipline and be experienced in cDNA cloning.

Amgen offers the unique opportunity to participate in challenging research programs using state-of-the-art technology in an environment that fosters scientific creativity and collaboration. If you have the necessary skills and qualifications and would like to experience research in a supportive company environment, please send a resume or C.V., in confidence, to:

AMGEN BOULDER, INC.
Personnel Dept.
2045 32nd Street
Boulder
CO 80301

Equal
Opportunity
Employer

AMGEN

*Colby
College*



Associate Director for Academic Computing

Colby College, a highly selective liberal arts college of 1700 students located in Central Maine, seeks an experienced academic computing advocate to add to its current Computer Services staff of twelve. Colby's computing facilities include 4 VAX machines (6410, 8350, 8200, and 3600, all running Ultrix) and over 1,000 Macintosh micro-computers having extensive local and wide area network access.

The Associate Director for Academic Computing reports to the Director for Computer Services, and also holds a faculty appointment in an academic department. The successful candidate will provide coordination between academic departments and Computer Services in determining strategies for increasing and enhancing computing activity in both teaching and research.

Two copies of a letter of application, including curriculum vitae and statement of academic computing interest, must be received by **February 16, 1990**. Three letters of recommendation must also be received by that deadline. Submit applications and requests for additional information to: **Mr. Robert E. Keane, Director of Personnel Services, Colby College, Waterville, ME 04901.** Colby is an EO/AA Employer.

NMR Program Head Battelle, Pacific Northwest Laboratories

Battelle, Pacific Northwest Laboratories is seeking a senior scientist to head a new multiuser NMR facility that is part of its Molecular Science Research Center. The NMR facility will contain 300- and 500-MHz spectrometers with capabilities for 2-D NMR on solids and liquids. A new spectrometer operating in the frequency range of 800 to 1000 MHz will also be developed as part of the long-range plans for structural studies on macromolecules, including nucleic acids, proteins and polymers.

The Pacific Northwest Laboratory is one of five national multiprogram energy laboratories, and is operated by the Battelle Memorial Institute under a contract with the U.S. Department of Energy. The Laboratory has a staff of approximately 3000 personnel conducting research in physics, chemistry, materials, engineering, mathematics and computer science, earth and environmental sciences, and the life sciences.

Applicants should send a resume, reprints of 3-5 recent publications, and the names and telephone numbers of 4 references to: **Dr. T.S. Tenforde, Chief Scientist, Life Sciences Center (KI-50), Battelle, Pacific Northwest Laboratories, P.O. Box 999, Richland, Washington 99352.** Deadline for receipt of application is **April 13, 1990.** An Affirmative Action, Equal Opportunity Employer.



Battelle
Pacific Northwest Laboratories

Senior Scientist MOLECULAR GENETICS

Hoffmann-La Roche is an established leader in the pharmaceutical and health care industry, with a strong commitment to biotechnology. The Department of Molecular Genetics in the Roche Research Center conducts basic and applied research on lymphokines, growth factors, receptors and other areas with relevance to human pharmaceuticals.

We are actively seeking a Senior Scientist to be responsible for an exploratory research program specializing in the development, characterization and validation of assays to measure therapeutic proteins and antibodies generated against these proteins in samples from pre-clinical and clinical studies. The research program will also include the development of novel probes and assays, such as assays based on recombinant receptors, which can specifically replace biological assays to measure biologically active proteins.

We encourage active publication, both internal and external research collaborations and training of postdoctoral fellows. Qualifications include a PhD in Biochemistry, Pharmacology, Cell Biology or a related discipline, and a minimum of two years of postdoctoral training.

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



Hoffmann-La Roche

Working Today For A Healthier Tomorrow.

Fish Pathologist II

We have a position for a Fish Pathologist II to help conduct a statewide finfish/shellfish health program and diagnostic service for the Alaska Department of Fish and Game, FRED Division.

Beginning salary is \$37,356/year. A Ph.D. is desired; a Bachelor's degree in microbiology, bacteriology, zoology, fisheries biology or closely related field and four years of professional experience in fish pathology is required.

Applicants should submit an official State of Alaska employment application and copies of college transcripts to the **Recruitment Coordinator, ADF&G, P.O. Box 3-2000, Juneau, AK 99802-2000, phone (907) 465-4140.** We are an equal opportunity employer.

State of Alaska

CELL BIOLOGISTS

The Biology Department at the University of Nevada, Reno, is committed to developing a strong program in cell biology and is inviting applications for two tenure-track positions in that area, beginning Fall, 1990. One position will be for an Assistant Professor, the other for an Associate Professor. Minimum qualifications for the Assistant Professor position include a Ph.D. and at least two years of postdoctoral experience. Applicants for the Associate Professor position should be well-established scientists with a strong record of publications and grant support.

Salaries are competitive and commensurate with experience. The successful candidates will be expected to develop or maintain vigorous, externally funded research programs and will occupy laboratories in the newly renovated and equipped Cell and Molecular Biology facility. Responsibilities also include teaching at the undergraduate and graduate levels.

Although we are looking for creative scientists without regard to specific areas of interest, candidates who study fundamental problems in development, neurobiology or genetics at the cellular and molecular levels are especially encouraged to apply.

Applicants should submit a curriculum vitae, a description of research interests, reprints, and the names, addresses, and telephone numbers of five references to:

Chair, Cell Biology Search Committee
Department of Biology
University of Nevada, Reno
Reno, NV 89557

To ensure full consideration applicants are encouraged to have all materials on file by February 28, 1990. Position will remain open until filled. AA/EOE. UNR employs only U.S. citizens and aliens lawfully authorized to work in the U.S. Applications from women and ethnic minorities are encouraged.

POSITIONS OPEN

POSTDOCTORAL POSITION available. The Department of Pathology at the University of Michigan Medical School has openings for postdoctoral positions which offer training in experimental pathology. Special emphasis is on immunopathology and mechanisms of lung disease. Interested candidates should have a strong interest in academic medicine. Send curriculum vitae to: **Kent J. Johnson, M.D., University of Michigan, Department of Pathology, 1301 Catherine Road, Ann Arbor, MI 48109-0602.** An Equal Opportunity/Affirmative Action Employer.

ENTOMOLOGY POSTDOCTORAL

The Insects Affecting Man and Animals Research Laboratory (IAMARL) (USDA, ARS) seeks a postdoctoral **RESEARCH ASSOCIATE** to distinguish the ecological niches of field populations of sibling species of *Anopheles quadrimaculatus*. Need: relevant Ph.D. degree within past 3 years, training in insect population dynamics, and demonstrated experience with natural populations of Diptera. Available March 1990 for 2 years plus benefits. Salary commensurate with experience (\$28,852 to \$44,957). Send curriculum vitae, transcripts, pertinent reprints, and names of five references to: **D. R. Barnard, IAMARL, P.O. Box 14565, Gainesville, FL 32604.** Deadline: 28 February 1990. An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Available immediately at the Joseph W. Jones Ecological Research Center. The Jones Center is being established at Ichauway, a 28,000-acre reserve in southwest Georgia which contains perhaps the largest remnant of the longleaf pine/wiregrass ecosystem and over 12 miles each of the blackwater Ichauway-Nochaway Creek and the brownwater Flint River. We seek individuals oriented to field environments with interests in plant, wildlife, or stream ecology. Applicants must have a Ph.D.

Inquiries and applications should be sent to: **Charles H. McTier, President, Robert W. Woodruff Foundation, Suite 1400, 230 Peachtree Street, N.W., Atlanta, GA 30303.** Applications should include names of three references and a brief description of the proposed work, and should be submitted before 15 April 1990. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Three postdoctoral positions are available in the Department of Physiology. Research areas include (i) role of gap junctions in regulation of vascular function, studied in vivo and in vitro with electrophysiological and immunological techniques (**Dr. Janis Burt**); (ii) function and control of transporters of organic molecules, studied in isolated renal tubules and membranes (**Dr. William Dantzer**); (iii) isolated and molecular characterization of organic nutrient transporters in several developmental systems (background in protein chemistry desirable) (**Dr. Stephen Wright**). Start dates and salaries are negotiable. Applications will be accepted until positions are filled or until 1 March 1990, whichever is earlier. Send curriculum vitae and three letters of reference to:

Drs. Burt, Dantzer, or Wright
Department of Physiology
College of Medicine
University of Arizona
Tucson, AZ 85724

The University of Arizona is an Affirmative Action/Equal Opportunity Employer and applications from females and minority members are strongly encouraged.

Ph.D. SCIENTIST, MEMBRANE RESEARCH.

The Liposome Company, a growing biopharmaceutical firm specializing in lipid-based drug delivery systems, is offering a challenging opportunity for a scientist with a background in liposomology, membrane biophysics, or physical chemistry to conduct a broad-based research program as part of its innovative liposomology group. Ph.D. and 0 to 3 years of postdoctoral experience required. Experience in freeze-fracture is desirable but not necessary. The Liposome Company is an equal opportunity employer offering competitive salaries, generous stock options, comprehensive benefits, and a creative work environment. Please forward your résumé to: **Dr. Andrew Janoff, Executive Director of Research, The Liposome Company, One Research Way, Princeton, NJ 08540.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE.

Position available to study intestinal epithelial receptors to adhesive pili of *Escherichia coli*. Ph.D. in microbiology, biochemistry, or allied field, with experience in protein purification. To apply, send a résumé, a statement of research interests, and the names and addresses of three references by 26 February 1990 to: Drs. David Francis or David Benfield, Department of Veterinary Science, South Dakota State University (SDSU), P.O. Box 2175, Brookings, SD 57007. Telephone: 605-688-5171. SDSU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION as

an ASSISTANT RESEARCH SCIENTIST is immediately available in lipid metabolism laboratory. Major emphasis on transport of vitamin E in plasma lipoproteins and regulatory mechanisms for discrimination of stereoisomeric forms to vitamin E. Experience in HPLC, GC, ultracentrifugation, PAGE, and protein purification desirable. Please send curriculum vitae and names of three references to: Joan Harmon, Personnel Department, New York University Medical Center, 550 First Avenue, New York, NY 10016. An Equal Opportunity Employer, M/F.

PROGRAM OFFICER FOR BIODIVERSITY SUPPORT PROGRAM

World Wildlife Fund (WWF), as the lead organization of a joint venture with The Nature Conservancy and the World Resources Institute's Center for International Development and Environment is searching for a program officer to join biodiversity support program. The program officer will assist with efforts to meet the goals of the program to conserve biological diversity and promote sustainable economic growth in selected developing countries through improved conservation and use of biological resources.

Substantial work experience in less-developed countries, preferably in conservation and/or development activities, and an advanced degree in environmental science, international development, or a related field or equivalent combination of education and experience required. Candidates should demonstrate excellent communication skills, both oral and written, and be comfortable communicating in both English and French or Spanish or Portuguese. Agency for International Development experience desired.

Forward résumé to: World Wildlife Fund, Personnel Department 8F, 1250 24th Street, N.W., Washington, DC 20037. Salary and benefits appropriate to U.S. nonprofit sector. Equal Opportunity Employer. Please respond by 26 February 1990.

PROTEIN BIOCHEMIST HOWARD HUGHES MEDICAL INSTITUTE MASSACHUSETTS GENERAL HOSPITAL

A unique and exciting opportunity is open for an appropriately qualified biochemist to work in a microchemical facility equipped with state-of-the-art instrumentation. Functions of the facility include protein microsequencing, peptide and nucleic acid synthesis, and characterizations. The studies involve the design of protein analogs of important hormone ligands and components of nuclear transcription factors. There will also be opportunity for methods developments research. Prerequisites are a Ph.D. or M.S. degree in biochemistry and some experience with protein synthesis or sequencing. Top salary and extensive benefits are available. Send résumé to: Sheila G. Magil, Ph.D., Howard Hughes Medical Institute, Wellman 511, Massachusetts General Hospital, Boston, MA 02114. Equal Opportunity Employer.

RESEARCH ASSOCIATE. Conduct research on nuclear magnetic resonance (NMR) spectroscopy of humans to develop noninvasive, in vivo techniques to study the biochemistry of muscle and brain diseases. Record and analyze ³¹P, ¹³C, and ¹H NMR spectra of humans in vivo and excised human tissues. Ph.D. in chemistry or biochemistry and 2 years of postdoctoral research experience in NMR spectroscopy of biological molecules required. Salary: \$27,500 per year; 40 hours per week, 9:00 a.m. to 5:00 p.m. This is a university position. Send résumé to: Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605. Attention: Robert S. Felton, Reference V-IL 9840-F. An employer-paid ad.

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To study *in vivo* role of selected cytokines in animal models of immunologically mediated disease. Explore mechanisms of cytokine involvement using molecular biology, immunohistochemistry and cellular immunology, as well as administering anti-cytokine antibodies by standard and novel means. Background in cellular immunology, gene expression, histology and experience with disease models desirable.

At Schering-Plough, you'll receive the support and recognition you need to pursue your best ideas. In addition to outstanding resources and an exciting research environment, we offer an attractive salary and benefits. For prompt, confidential consideration, please forward resume and indication of position desired to: Mr. R. Blackburn, Schering-Plough Research, Box DD88-73, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

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The position requires an M.S. or Ph.D. in animal/plant ecology, zoology, wildlife biology, aquatic biology or environmental sciences or a BA degree with a minimum 3 years practical field experience ideally as a biologist or ecologist doing pesticide research. Regulatory experience is very desirable but not essential.

Our modern facilities are located in a pleasant suburban setting near Wilmington, Delaware, where we offer career growth in a professional environment. Send resume including salary history to **H.P. McKenry, ICI AMERICAS INC., Wilmington, DE 19897**. Equal opportunity employer, M/F.



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Duties of the new professor include teaching exercise physiology to physical education students as well as system physiology to students of pharmacy, biology and environmental natural sciences. He is expected to develop an active research program in which undergraduates can participate and to supervise graduate biology students in their thesis work.

Candidates will have the M.D. or Ph.D., an outstanding research record in the field of exercise physiology and the ability to perform and direct high quality research. Willingness to cooperate with colleagues within and outside the Swiss Federal Institute of Technology is most important.

Applications with curriculum vitae and list of publications should be submitted before **March 31, 1990**, to the President of the ETH Zurich, Prof. Dr. H. Bühlmann, ETH-Zentrum, CH-8092 Zurich.

Senior Staff Pathologist

Genentech, Inc., a leader in the field of biotechnology, has an opening for a Sr. Staff Pathologist in our Safety Evaluation department.

Reporting directly to the Associate Director, the individual will be responsible for performance of directed as well as independent studies related to investigation of real and potential pathological conditions which occur naturally or are induced. These will include preclinical investigative studies as well as GLP toxicology studies. Requirements include DVM/VMD, ACVP Board Certification, with a minimum of two years' experience in toxicology or comparative laboratory animal pathology.

Genentech, Inc., offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For consideration, please send your C.V. to Human Resources Department 7019, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

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Senior Scientists-Ph.D.

Enzo Diagnostics, Inc., a dynamic health care company located in New York City, is dedicated to the development of DNA probe-based and antibody-based diagnostic tests. Enzo offers challenging positions with competitive salaries and benefits package.

TECHNOLOGY DEVELOPMENT-Candidates should have a background in enzymology, immunochemistry and/or nucleic acid biochemistry (including DNA hybridization) in order to develop non-radioactive signal amplification methods for application to DNA hybridization assays.

IMMUNOCHEMIST-Experience in the purification, characterization and quality control of monoclonal antibodies is required. The successful candidate will be responsible for the development of immunological products.

ORGANIC CHEMIST-Experience in nucleotide chemistry is required for the development of methods for labeling nucleic acids, chemical modifications of nucleotides and oligomer synthesis.

For immediate consideration, please forward CV to:

ENZO DIAGNOSTICS, INC.

325 Hudson Street, New York, NY
10013, Attn: Dept. S.F.

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At SmithKline Beecham Pharmaceuticals you'll collaborate with some of the world's finest scientific minds in an effort to discover and publish breakthrough research findings.

As a Postdoctoral Scientist within our Protein Biochemistry Department, you'll be responsible for performing research in one of the following areas: folding and oxidation of recombinant proteins; proteins involved in viral regulation, protein, structure and function studies or delivery of protein and peptide pharmaceuticals.

To succeed, you'll need a recent Ph.D. in Biochemistry, Enzymology or Protein Chemistry plus the motivation and people skills to conduct innovative research in a multidisciplinary, dynamic environment.

We offer an excellent salary and comprehensive benefits. For confidential consideration, send your resume and salary requirements to: **Barbara Schwartz, S0118, Senior Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939.** Equal Opportunity Employer, M/F/H/V.

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A scientist, qualified to doctorate or PhD level, is required to contribute to the discovery of novel medicines for the treatment of bronchial diseases. Knowledge of experimental pharmaceutical models is essential and experience within the pharmaceutical industry would be a definite advantage.

Please send a handwritten letter of application, and CV to Media-System, 6 impasse des Deux-Cousins, 75849 Paris Cedex 17, France.

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This Summer, Look at Science from the Inside Out!

***Program:** A limited number of 4- and 8-week Fellowships are available at the Marine Biological Laboratory this summer for science reporters, editors, educators, and public policy makers. Fellows follow laboratory sessions and lectures of advanced graduate courses in the biological sciences, work hand-in-hand with laboratory investigators, and often are given research projects of their own. The program is introduced by a 5-day hands-on laboratory course designed to acquaint Fellows with molecular and cellular laboratory techniques. (The laboratory course is open to a few additional reporters who cannot undertake the full program.)

***Eligibility:** Applicants must be professional science reporters, editors, educators, or public policy makers with at least two years' experience. Preference will be given to print or broadcast journalists with staff positions, although freelancers will be considered. Applications from minority group members and women are strongly encouraged (some funding is available for under-represented minorities).

***Faculty:** Program Directors: Byron Waksman, M.D., New York University; Robert Goldman, Ph.D., Northwestern University; and Boyce Rensberger, M.S., *The Washington Post*.

Deadline for Applications: March 1, 1990

***For information and application contact:** Pamela Clapp, Science Writing Fellowship Program, Marine Biological Laboratory, Woods Hole, MA 02543. Tel: (508) 548-3705, ext. 428.

EMPLOYMENT AGENCIES

RESEARCH ASSISTANT, full-time, to operate and maintain an Applied Biosystem 475 Protein Sequencer, 431 Peptide Synthesizer, and Beckman System Gold Amino Acid Analyzer. B.S./M.S. required with experience in protein sequencing, peptide synthesis, and/or amino acid analysis preferred. Send letter of interest, curriculum vitae, and three letters of references to: **Dr. Russel Meints, Center for Gene Research and Biotechnology, Oregon State University (OSU), Corvallis, OR 97331-2906. Telephone: 503-737-3413.** Application closing date is 1 March 1990. Starting date is 1 April 1990. OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. OSU has a policy of being responsive to the needs of dual-career couples.

RESEARCH ASSOCIATE. To conduct research in the field of visual neurobiology; provide an alternative estimate of receptive field size among retinotectal W-2 cells in order to estimate coverage factor from dendritic overlap among retinotectal W-2 cells. Retinotectal W-2 cells, identified by retrograde transport, will be visualized, impaled, and stained intracellularly under visual guidance in vitro to permit field-size measurements; and use basic electrophysiological and sterile surgery techniques. Require Ph.D. (or admission to candidacy) in physiological optics/visual neurobiology; no experience required. Salary: \$19,000 per year. Apply with résumé to: **Rhode Island Job Service, 24 Mason Street, Providence, RI 02903, Attention: Sue Gould (#1064).**

RESEARCH ASSOCIATE

The Department of Biochemistry announces the availability of a research associate position in the area of metalloprotein structure and function. Previous experience in one of the following areas is desirable: purification and/or characterization of membrane-bound enzymes, mitochondrial electron transport proteins, biophysical techniques (especially epr). Interested individuals should send a complete résumé, together with the names of three people who are willing to provide references for the applicant.

All information should be sent immediately to: **G. Palmer, Biochemistry Department, Rice University, P.O. Box 1892, Houston, TX 77251. Rice University is an Equal Opportunity Employer.**

RESEARCH ASSOCIATE

The George Washington University Medical Center, Department of Anesthesiology, is seeking a research associate. The responsibilities include planning and execution of animal experiments in anesthesia research, supervision of employees, recording and reporting procedures and results, assisting in the training of students, and preparing biochemical assays. Requirements are a master's degree in biological science, 2 years of experience in animal research, and the ability to work independently. Benefits: salary commensurate with experience, retirement, disability, tuition, and health insurance. Please send résumé to: **Lynn M. Princic, The George Washington Hospital, Department of Anesthesiology, 901 23rd Street, N.W., Washington, DC 20037. George Washington University is an Affirmative Action/Equal Opportunity Employer.**

HITACHI CHEMICAL RESEARCH CENTER UNIVERSITY OF CALIFORNIA, IRVINE SENIOR SCIENTIST NEUROBIOLOGY

Hitachi Chemical is completing construction of a new biotechnology facility on the campus of the University of California, Irvine. Opening is planned for May 1990. The Hitachi Chemical Research Center will conduct basic research in the area of neurobiology utilizing molecular approaches. We seek a neuroscientist with research interests in the area of cell, developmental, or molecular biology. The candidate will have the opportunity to develop collaborative research projects with other faculty members at the University of California, Irvine, with the possibility of joint faculty appointments in an appropriate academic department. Please submit a résumé plus the names of three references to:

**Dr. Jack Jacobs
Director of Basic Research
Hitachi Chemical Research Center
Department of Biological Chemistry
University of California
Med Sci I, D240
Irvine, CA 92717**

EMPLOYMENT AGENCIES

MAGNETIC RESONANCE (MR) IMAGING RESEARCH SCIENTIST sought by Rush-Presbyterian-St. Luke's Medical Center. Position includes faculty appointments in diagnostic radiology and medical physics. Applicants should have a Ph.D. degree or its equivalent in physics, engineering, biochemistry, or a related field, interest in cardiovascular applications, and experience in MR pulse programming. Send curriculum vitae, reprints of relevant publications, and cover letter to: **David A. Turner, M.D., 1653 West Congress Parkway, Chicago, IL 60612, by 1 March 1990. Rush-Presbyterian-St. Luke's Medical Center is an Equal Opportunity/Affirmative Action Employer.**

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Positions in the field of veterinary virology and immunology available immediately with a rapidly growing biotechnology company located just outside Des Moines, Iowa. Will consider candidates with B.A./B.S. or M.A./M.S. degree, preferably with at least 2 to 5 years of work experience. Skills required include: cell culture manipulation, virus and antibody assays, experimental design and evaluation of veterinary vaccines utilizing latest virological and immunological technology. Please send résumé to: **Human Resources, Ambico, Inc., Box 522, Dallas Center, IA 50063.**

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Sangamon State University invites applications from graduates of science or engineering programs (baccalaureate, masters, doctorate) for two 10.5-month science internships beginning 1 October 1990 as part of the Illinois Legislative Staff Internship Program. The science interns will be assigned to Springfield or Chicago offices of the Illinois Legislative Research Unit which provides legislators with information and research about policy issues. Science interns receive \$1450 per month in compensation. Interested persons should send curriculum vitae by 1 March 1990 to: **Dr. Kent Redfield, Coordinator, Illinois Legislative Staff Internship Program, Sangamon State University, Springfield, IL 62794-9243.**

ASSOCIATE SCIENTIST. Wallingford, Connecticut. Perform experimental research in the characterization of organic compounds synthesized as potential pharmaceutical drugs for treatment of infections, tumors, and central nervous system and cardiovascular diseases using Bruker AM-300 high field nuclear magnetic resonance (NMR) spectrometer. Operate and maintain Bruker AM-300 NMR spectrometer interpreting 1D and 2D spectra to elucidate molecular structures of pharmaceutical compounds. Evaluate, interpret, and present data conclusions in form of reports, publications, and presentations. Master's degree in organic chemistry plus 6 months of experience in the job offered or 6 months of experience as NMR spectroscopist performing structural analysis of synthetic compounds required. Forty hours per week; \$35,000 per year. Send résumé to: **Job Service Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109. Refer to: Job Order #3064802.**

ASSOCIATE SCIENTIST with Ph.D. in engineering mechanics to be responsible for structure design, stress analysis, and structural optimization of large-scale superconductive energy storage magnets for utilities. The structure includes cryogenic structure, thin shell helium and vacuum vessels, and composite material struts, and work involves complex combinations of thermal and magnetic loads. Individual will develop various types of finite element codes for the stress and stability analyses of the specialized structures; design superconductive magnetic bearing systems, including analyses of rotor dynamics, magnetic bearing forces, and fluid mechanics; supervise structural designs; and represent the Applied Superconductivity Center on joint design committees with industrial contractors. Requirements: 3 years of work experience to include the following: finite element modeling of structures and composite materials, structure design and stress analysis, developing large computer codes, and fluid dynamics. Minimum of four publications in field as indication of research ability. Forty hours per week; \$50,000 per year. *Affirmative Action/Equal Opportunity Employer.* Résumé and three references due by 28 February 1990 to: **Judy Hedrick, Job Order #0380679, Job Service, 206 North Broom Street, Madison, WI 53703. This is an employer-paid ad.**

EMPLOYMENT AGENCIES

RESEARCH ASSOCIATE IN PHARMACOLOGY. To determine effects of alkylating agents on tumor cell DNA using postlabeling and alkaline elution. Requirements: Ph.D., 2 years of postdoctoral experience with DNA isolation and postlabeling analysis, publications, society membership. Forty hours per week, \$25,000 per year. This is a university position. *Equal Opportunity Employer.* Send résumé and references to: **Illinois Department of Employment Security, 401 South State Street, Chicago, IL 60605, Attn: Robert S. Felton; Reference: #V-IL 913-F. An employer-paid ad.**

A **RESEARCH POSITION** is available to work on localization of chromosomal origins of DNA replication in mammalian cells. This position requires a Ph.D. in an area of molecular biology and at least 3 years of postdoctoral experience. Preference will be given to applicants with experience in DNA replication, mammalian systems, and the structure and function of origins. Starting salary is \$27,000. Please direct applications to: **Dr. Melvin L. DePamphilis, Department of Cell and Developmental Biology, Roche Institute of Molecular Biology, 340 Kingsland Street, Nutley, NJ 07110. An Equal Opportunity Employer.**

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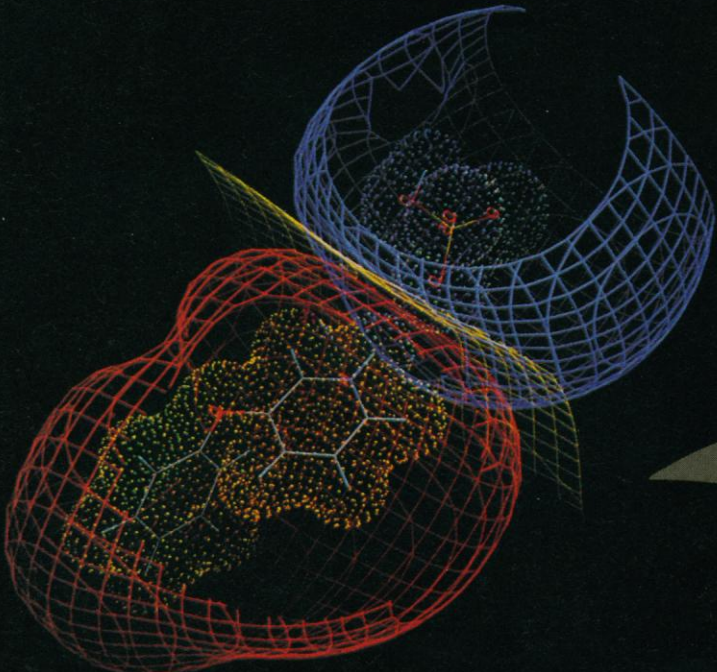
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contributes to protocol design, budget negotiation and the identification of potential field investigators as well as in the monitoring of ongoing trials within the region for investigational drugs in all therapeutic categories. Successful candidates should possess the equivalent of graduate-level training (MS, PhD, Pharm D, etc.) in life sciences with a sound understanding of several therapeutic areas. Prior pharmaceutical industry experience, particularly in clinical research is highly desirable. Outstanding oral and written communication skills are essential.

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the successful applicant will join an experienced multidisciplinary team of dedicated scientists working on novel treatments for human neurodegenerative diseases including Alzheimer's Disease. Candidates will possess a PhD in a neuroscience related field. Experience in assessment of the biological and molecular changes accompanying neuronal death and degeneration, excellent written and oral communication skills, and ability to work as part of a team are required. Preference will be given to candidates experienced with aberrant processing of neuronal proteins in the central nervous system.

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responsible for the development and characterization of "in vivo" animal models of arthritis. The position requires a BS/MS degree with five years of post-college laboratory experience in the areas of bone/cartilage/connective tissue. Experience with histopathological and radiological techniques for the assessment of joint damage is essential. Surgical skills and experience working with small animals are desirable.

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involves working with physicians, designing experiments, analyzing data from clinical trials and preparing comprehensive statistical reports of the results. Candidates will possess a recent PhD or equivalent in statistics. Strong consulting and communication skills, and good working knowledge of a scientific computer language and/or the statistical package SAS are required.

To explore your future on the frontier of medical research, send your resume or curriculum vitae, in confidence, to:
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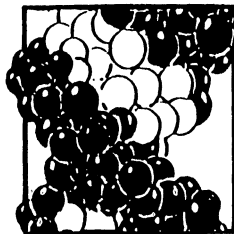
Qualified candidates for this position must have a B.S. or M.S. in Cell Biology, Biochemistry or a related discipline and a minimum of two years' experience in mammalian cell culture and general biochemical techniques. Familiarity with immunological and biological assays for the quantification of biological activity is essential.

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In 1984, Integrated Genetics initiated a major research program devoted to the study of genetic disease.

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In 1989, IG became the first fully integrated prenatal genetic testing laboratory by adding cytogenetic and biochemical testing to its extensive menu of DNA-based tests.

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Laboratory Supervisor

As the director of operations in our DNA Diagnostic Laboratory, this individual is accountable for delivering the highest quality results and developing the laboratory to maintain IG's leadership position. Managerial responsibility for current laboratory members and training of new members is involved as is the opportunity to pursue applied research questions.

The qualified applicant must have a BS and MS (or equivalent) in a biological science, 4-5 years of experience in human and molecular genetics and the ability to supervise effectively. Experience in a clinical diagnostic laboratory is desirable.

Integrated Genetics offers an excellent compensation and benefits package, including equity participation, a 401(k) Plan with a company match, tuition assistance and medical, dental, life and vision care insurance. For immediate consideration, please call us at 1-800-255-7357 and speak with Steve Grossman. Alternatively, please send your resume to: Director, Human Resources, Dept. S126, Integrated Genetics, One Mountain Road, Framingham, MA 01701.

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The following positions are available to outstanding individuals for challenging opportunities in molecular design and basic computational chemistry research.

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Background in physical chemistry, quantum chemistry, biochemistry, X-ray crystallography or NMR and experience using Computer Assisted Molecular Design software desired.

BIOSYM develops software tools and performs basic research for solving a variety of fundamental problems in molecular biology, drug design and chemistry. Research areas include peptide, protein, DNA and lipid modeling, force field parameterization, and electrostatics. Leading companies collaborate with us in projects to improve the rigor of calculations including consortia for the development of force field parameters and for the development of software tools for polymers. Our current programs (*Discover*, *Insight*, *Homology*, *DMol*, *DelPhi*, and *Probe*) are used in over 250 laboratories worldwide.

Interested candidates should send CV, copies of transcripts and three letters of reference to:



BIOSYM Technologies, Inc.
Personnel
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San Diego, CA 92121
EOE M/F/H/V

SENIOR SCIENTIST POSITIONS

Department of Drugs

The American Medical Association, one of the nation's leading advocates of better public health, is currently seeking two Senior Scientists to join our challenging, progressive Department of Drugs.

The successful candidates will review and evaluate pertinent literature, consult with various experts, and organize and present acquired medical knowledge for the AMA's Drug Evaluations. Additional responsibilities will include: serving as an AMA topical resource professional; representing the Department of Drugs at national meetings; and aiding in the development of AMA drug legislation positions.

Candidates for both positions must have an M.D. or Ph.D. in pharmacology (or related biomedical science) or PharmD degree. Knowledge/training/experience in general pharmacology is essential. Individuals with a background in metabolic diseases/endocrinology or infectious diseases are of particular interest. Publication and professional experience in academic, governmental, or industrial pharmacology is highly desired.

In addition to the challenge of these positions, the AMA offers a competitive compensation/benefit package and national visibility. Please send resume and salary history to: **Div. of Placement, Dept. PP/SDB-1690, AMERICAN MEDICAL ASSOCIATION, 535 N. Dearborn Street, Chicago, IL 60610.** Equal Opportunity Employer.



Fermentation Specialist

A position is currently available for a Microbial Physiologist experienced in the optimization of growth and expression condition for recombinant microorganisms. The successful candidate will be involved in the development and improvement of fermentation processes that result in the production of heterologous proteins. Responsibilities will include investigation into the physiology associated with heterologous expression. Knowledge of the general analytical techniques used in the assessment of microbial fermentations is essential. Experience in the area of protein chemistry will be advantageous. Qualified applicants will have a BS/MS with 5 to 7 years' experience or a Ph.D. with 0-2 years' experience.

Please send resumes in confidence to Peter Lasky, Genetics Institute, One Burtt Road, Andover, MA 01810.

Molecular Biologists

Several positions are currently available at the Bachelor's, Master's and Ph.D. levels. Two positions will be involved with developing PCR and molecular techniques to screen for viral contaminations and oncogene activation. These positions require a Master's or Ph.D. in a related field and the ability to work independently. A third position will be involved with colony stimulating factor research within our Hematopoiesis laboratory. This position requires a Bachelor's or Master's degree. All positions require broad and in-depth knowledge of general molecular biology techniques, including but not limited to constructing and screening cDNA libraries, PCR cloning, plasmid preps and restriction enzymes.

Please send resumes in confidence to Sheri Rist, Genetics Institute, 87 CambridgePark Drive, Cambridge, MA 02140.

Genetics Institute offers an exceptional compensation package including, competitive salaries, comprehensive benefits and equity participation. An Equal Opportunity Employer M/F/H/V.

Genetics Institute

RESEARCH TOXICOLOGIST

Searle, a worldwide leader in pharmaceutical research and development, has an outstanding growth opportunity for a Research Toxicologist.

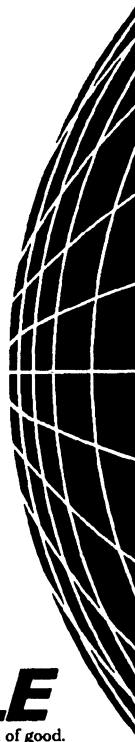
The skilled professional we select will conduct and oversee a full spectrum of pre-clinical studies and assure compliance with Good Laboratory Practice regulations, standard operating procedures, study protocols and accepted laboratory practices. Specific duties include performing hands-on study procedures and supervising the conduct of various study activities, preparing draft study protocols and reports, and contributing to the development of new study techniques.

Qualified candidates will possess a Master's degree with 2 years experience or a Bachelor's degree and 4 years experience. Experience in the conduct of toxicity studies as well as good written and oral communication skills are required.

Join us as we take the pharmaceutical industry into the 1990's, and beyond. For consideration, please contact: Searle, Human Resources, Dept. KK1, 4901 Searle Parkway, Skokie, IL 60077.

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ABBOTT LABORATORIES

With a demonstrated commitment to R&D, Abbott Laboratories' Pharmaceutical Products Division continues to lead in the development and manufacture of anti-infective, cardiovascular and anti-convulsant/neurological products. Today, due to ongoing expansion, we offer the following opportunities within our Drug Metabolism Department.

PHARMACOKINETICIST

Primary responsibilities include design, analysis and reporting of animal and clinical pharmacokinetic studies. Capabilities in the development and supervision of analytical procedures for drugs and metabolites are desirable. Qualifications include a Ph.D. in Pharmacokinetics, Biopharmaceutics or related disciplines, with 2-6 years experience. The position requires a command of kinetics, drug metabolism, physiology, statistics, computing and chromatographic/bioanalytical techniques. Writing skills are essential. Job #7612.

BIOANALYSTS

Responsibilities involve development and validation of novel analytical methods for drugs and metabolites in biological matrices. We require a Ph.D. or equivalent with at least 1-6 years of laboratory experience and supervision of analytical data generation. Knowledge of HPLC, GC and sensitive detection/derivatization techniques is essential. Experience in chemical kinetics, pharmacokinetics, statistics and computer systems is required. Familiarity with pharmaceutical formulation, metabolism, immunoassay, and peptide analysis is also desired. Job #7612-A.

METABOLISM INVESTIGATOR

Responsibilities involve the design and implementation of studies investigating the absorption, distribution, metabolism and excretion of radiolabeled drugs in laboratory animals and humans. The individual we seek will have a Ph.D. or equivalent experience in Biochemistry, Pharmacology, Medicinal Chemistry or Toxicology with a minimum of 1-3 years experience. Experience in TLC, HPLC and GLC methods and derivatization techniques is essential. A background in in-vivo drug disposition studies is desired. Job #7612-B.

BIOMETABOLIST

Responsibilities include developing methods for screening discovery compounds and metabolites in both in-vivo and in-vitro models. A Ph.D. or equivalent experience in Pharmacology, Biochemistry, Toxicology or Medicinal Chemistry is required along with a minimum of 1-3 years of experience. Experience in HPLC and GC techniques is essential. Knowledge of drug metabolism and pharmacokinetics is also essential. Understanding of sensitive detection/derivatization techniques, especially fluorescence, chemiluminescence or electrochemistry would be an asset. Job #7612-C.

Abbott provides competitive compensation and benefits including profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. Please send your resume, including salary history, with Job Number interested in to: Patricia Handy, Corporate Placement, Abbott Laboratories, 1 Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer.

MEETING BOUND?

Abbott representatives will be at the American Association for the Advancement of Science February 15th-20th. To arrange an interview, please send a resume to Patricia Handy prior to the conference.

ABBOTT LABORATORIES



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SERADYN, INC., a subsidiary of *Mitsubishi Kasei Corporation* is expanding its Immunassay research and has the following immediate and key challenges:

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Experienced in the synthesis of antigenically active drug and hormone conjugates.

SCIENTIST

To work on the development of diagnostic kits for hormones and therapeutic drugs. A Ph.D. with 0-3 years experience is preferred.

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We offer a competitive salary and benefit program in a professional, friendly environment. For confidential consideration, send resume and salary history to the Personnel Manager.

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CARDIOLOGISTS:

Clinical and Basic Research

The University of Pennsylvania, children's Hospital of Philadelphia is recruiting five faculty for the Division of Cardiology:

RESEARCH CARDIOLOGIST, (M.D./Ph.D.):
Developmental biology of the heart. Assistant Professor.

NONINVASIVE CARDIOLOGIST, (M.D.):
To join noninvasive group assessing congenital heart defects. Experience in echocardiography, MRI. Assist/Assoc. Professor.

ELECTROPHYSIOLOGIST, (M.D.):
Research interest in intracellular electrophysiology with expertise in arrhythmia management, pacemakers, His studies. Assist/Assoc. Professor.

DEVELOPMENTAL BIOLOGIST, (Ph.D.):
Research in cardiac embryology. Experience in growth factors, molecular biology techniques preferable. Assistant Professor.

PERINATAL CARDIOLOGIST, (M.D.):
Fetal and neonatal cardiology with perinatal physiology research required. Molecular training desirable. Assistant Professor.

Send CV and references to:

James Huhta, M.D.
Division of Cardiology
Children's Hospital of Philadelphia
34th Stret & Civic Center Blvd.
Philadelphia, PA 19104

University of Pennsylvania is an equal opportunity affirmative action employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

AUSTRALIA MONASH UNIVERSITY CENTER FOR MOLECULAR BIOLOGY AND MEDICINE RESEARCH OFFICERS/ SENIOR RESEARCH OFFICERS

The senior research officer position offers an exciting challenge to suitably qualified science or medical graduates to assist in the leadership of a group of early postdoctoral and Ph.D. students engaged in a broadly-based research program on the interferons. Research officer positions are available for work in several different exciting areas embracing interferon research, mitochondrial pathologies and aging, and glycoproteins in cancer. Applicants should be experienced in one or more aspects of advanced molecular biology such as gene and protein technology, immunology, or polysaccharide chemistry. Salary: research officer, A\$27,953 to A\$31,808 per annum; senior research officer, A\$32,197 to A\$41,841 per annum. Direct inquiries to: **Professor A. W. Linane, D.Sc., FAA, FRS. Telephone: 3-565-3727.** Send applications including Reference Number 90A2, curriculum vitae, and three referees to: Registrar, Monash University, Clayton, Victoria, Australia 3168 by 16 February 1990.

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FELLOWSHIPS

POSTDOCTORAL FELLOW. Investigations of alterations in vascular proteoglycans in aging and disease require the expertise of a scientist with strong background in biochemistry/immunochimistry. Write: **H. Fillit, M.D., The Laboratory for Immunology and Aging, Department of Geriatrics, Box 1070, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574, or telephone: 212-241-4272.** *An Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIPS for M.D.'s or Ph.D.'s to study the molecular genetics and pathogenesis of neurodegenerative disorders, especially Alzheimer's disease. Preference given to individuals with background in molecular biology or protein chemistry. U.S. citizenship not required. Reply with curriculum vitae and names of references to: **Drs. E. A. Schon or J. Herbert, Department of Neurology, College of Physicians of Columbia University, 630 West 168th Street, New York, NY 10032.** *Columbia University is an Equal Opportunity Employer.*

RESEARCH STAFF FELLOW or SENIOR STAFF FELLOW. Position available now to investigate genetic variation and molecular mechanisms controlling expression of genes involved in serotonergic neurotransmission. Salary range: \$24,000 to \$52,825, depending upon qualifications and experience. Applicants should have a Ph.D. or M.D. and training in molecular biology, recombinant DNA technology, or neurobiology. Send curriculum vitae and three references or letters of reference to: **Dr. David Goldman, Section on Genetic Studies, Laboratory on Clinical Studies, National Institute on Alcohol Abuse and Alcoholism (NIAAA), Building 10, Room 3C103, 9000 Rockville Pike, Bethesda, MD 20892.**

NIAAA is an Equal Opportunity Employer.

VECTOR MOLECULAR BIOLOGY, PARASITOLOGY, EPIDEMIOLOGY

The Arthropod-Borne and Infectious Diseases Laboratory (AIDL) invites applications for several pre- (B.S., M.S.) and postdoctoral (D.V.M., M.D., Ph.D.) **FELLOWSHIPS.** Support is provided by the MacArthur Foundation for studies in vector molecular biology and an NIH training grant in medical entomology, epidemiology, and parasitology. This training program involves 20 university faculty members and about 25 affiliate faculty in two federal laboratories nearby. The AIDL was established for training, education, and research in modern molecular and quantitative epidemiologic methods as well as more traditional methods of disease control. Positions are available now. Contact: **Dr. Barry J. Beaty, AIDL, Foothills Campus, Colorado State University (CSU), Ft. Collins, CO 80523.** Telephone: 303-491-6794.

CSU is an Equal Opportunity/Affirmative Action Employer. E.O. Office: 314 Student Services Building.

FELLOWSHIPS

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE. Position available to study regulation of gene expression and intracellular signalling pathways in endothelial cells. Laboratory is part of a diverse, interdisciplinary group investigating the biochemistry, molecular, and cell biology of vascular cells. Competitive salary and excellent fringe benefits. Send curriculum vitae and names of three references to: **Dr. Paul DiCorleto, Department of Vascular Cell Biology, The Cleveland Clinic Research Institute, FF4, 9500 Euclid Avenue, Cleveland, OH 44195.**

POSTDOCTORAL FELLOW. A position is available in April 1990 to study the structure and hormonal regulation of testicular genes. The project involves in vivo and in vitro experiments to delineate mechanisms that control tissue-specific and hormonally modulated transcription of genes in rat testis. Applicants must have Ph.D. or an M.D. degree (or equivalent) with training in reproductive endocrinology and experience with recombinant DNA techniques. Send curriculum vitae and the names and addresses of three references to: **Dr. Ching-Ling C. Chen, Center for Biomedical Research, The Population Council, 1230 York Avenue, New York, NY 10021.**

RESEARCH FELLOWSHIP IN OTOLARYNGOLOGY AND RELATED BASIC SCIENCE SPECIALTIES—A 2-year fellowship is available for a Ph.D. basic scientist. Opportunities available: tumor preparation, cell culture, flow cytometry, biochemistry of the inner ear, olfactory physiology, energy-linked transport in the inner ear, cancer immunology, deglutition, mucosal immunology, psychosocial intervention of cancer patients, experimental therapeutics, and vestibular physiology.

Send curriculum vitae, brief description of research interests, and three letters of references to: **Robert Mathog, M.D., Chairman, Otolaryngology 5E-UHC, Wayne State University, 540 East Canfield, Detroit, MI 48201.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS IN NEW DRUG DEVELOPMENT

Pfizer Pharmaceuticals is offering fellowships in the areas of microbiology, infectious diseases, pharmacology, pharmacokinetics, and toxicology, to provide training and management experience in the clinical and nonclinical development of anti-allergic, cardiovascular, CNS/analgesic, and anti-infective drugs. Two awards will be given annually. Applicants must have a Ph.D., M.D., or Pharm.D., and no more than 1 year of non-industry postdoctoral experience as of 1 July 1990. The application deadline is 1 May 1990. For further information and application materials contact:

**Fellowship Program in New Drug Development
Department of Clinical and Scientific Affairs
Pfizer Pharmaceuticals
235 East 42nd Street
New York, NY 10017
Attention: Evan A. Stringer, Ph.D.
Telephone: 212-573-7984**

POSTDOCTORAL FELLOW

Cetus Corporation is a leader in the development of biotechnology-based therapeutics for cancer and infectious diseases. We have an NIH-funded postdoctoral position available immediately to study the relationship between human class II and T cell receptor genes and HLA-related disease susceptibility.

The appropriate candidate should have a strong background in immunology with 0 to 3 years of postdoctoral experience. Technical expertise in the areas of human T cell cloning and antigen presentation is desired, along with a basic understanding of molecular techniques. This is a good position for an immunologist with a solid background in cellular immunology to learn molecular approaches (which would include PCR) to questions in immunology. Funding is for 3 years, with a company-based pay scale.

Cetus offers an excellent benefits package along with a collaborative environment that encourages career growth. Interested individuals should send their curriculum vitae, a letter describing their current and future research interests, and the names of three references to: **Human Resources, Box 90002/HE, Laboratory of Dr. A. Erlich, Department of Human Genetics, Cetus Corporation, 1400 53rd Street, Emeryville, CA 94608.** *Equal Opportunity Employer.*

RESEARCH FELLOWS CARTILAGE/ARTHRITIS RESEARCH

Joint Diseases Laboratory
Shriners Hospital for Crippled Children
McGill University
1529 Cedar Avenue, Montreal, Quebec
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The following research fellowships for those holding Ph.D. or M.D. degrees exist for periods of up to 4 years.

Cartilage Degradation in Arthritis

(Dr. A. Robin Poole)

A new position for work on the cleavage of type II collagen in experimental and human arthritis.

Autoimmunity to Cartilage Proteoglycan in Arthritis

(Dr. A. Robin Poole)

A new position for work on autoimmunity to cartilage proteoglycan in animals and humans with arthritis.

Targetable Proteinase Inhibitors

(Dr. John S. Mort)

An ongoing project to express recombinant forms of proteinase inhibitors that have been modified to allow targeting to cartilage.

The research laboratory has a total staff of approximately 30 persons working on the biochemistry, molecular biology and immunology of cartilage development, structure, synthesis and degradation in health and arthritis. Applicants should write to the scientist indicated, providing a detailed curriculum vitae, together with the names of referees.

Salaries will be according to experience and qualifications.



NATIONAL UNIVERSITY OF SINGAPORE
DEPARTMENT OF ORTHOPAEDIC SURGERY

RESEARCH FELLOW

Applications are invited for appointment as Research Fellow in the Department of Orthopaedic Surgery. Candidates should possess a PhD Degree in Biochemistry and preferably have some research experience in biochemistry of soft tissues, cartilage and bone, quantitative morphometry and immunochemical work.

The successful candidate will be required to assist in the running of the biochemistry laboratory in the Department. The appointment may be for up to three years at a time.

Gross monthly emoluments will range from S\$3739 to \$5350. (US\$1 = S\$1.93 approx.) The commencing salary is dependent upon the qualifications and experience of the appointee.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance of S\$1,000 or S\$2,000, subsidised housing at nominal rentals ranging from S\$100 to S\$216 p.m., education allowance for up to three children subject to a maximum of S\$10,000 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore.

Candidates should write to the **Director, Personnel Department, National University of Singapore, 10 Kent Ridge Crescent, Singapore 0511**, giving their curriculum vitae and the names and addresses of three referees who can comment on their research ability and/or professional competence.

Enquiries may also be sent through BITNET to: **PERSDEPT @ NUSVM**, or through **Telefax: (65) 7783948**

ENVIRONMENTAL SCIENCE AND ENGINEERING FELLOWSHIPS SUMMER 1990

Applications Invited

The American Association for the Advancement of Science (AAAS) invites applications for ten environmental science and engineering fellowships available for summer 1990. The Fellows will work at the U.S. Environmental Protection Agency (EPA), with the Office of Research and Development, in Washington, DC, to assist in identifying and assessing the significance of long-range environmental problems and opportunities. The ten-week fellowships will run June 4 through August 10, 1990.

Applicants must be postdoctoral to mid-career scientists and engineers. Candidates may be from the physical, biological, or behavioral sciences, or any field of engineering or other relevant professional fields. Fellows are expected to be critical thinkers, articulate, adaptable, and able to work with a variety of people from different professional backgrounds. Applicants must be residents of the U.S.

The 1990 Environmental Fellows will receive a stipend of \$800 per week and a nominal additional amount for temporary relocation expenses and travel in connection with the fellowships.

A detailed, future-oriented research project will be conducted by each Fellow which is of mutual interest to the Fellow and EPA. A project report will be submitted at the completion of the summer's work. Typical areas of research interest within EPA include: environmental risk assessment; biological pesticides; acid deposition; mobile source air pollution; oxidants, gases and particles; global climate; municipal waste water and spills; drinking water; hazardous waste; chemical testing and assessment; pesticides; radiation; and energy.

Deadline for applications is March 1, 1990. The awards will be announced by April 30, 1990. The continuation of this program, now in its 10th year, is contingent on the availability of funds. For further information and specific application requirements contact:

Environmental Science and Engineering Fellows Program
American Association for the Advancement of Science
1333 H Street, NW, Washington, DC 20005
202/326-6600

FELLOWSHIPS

CLINICAL AND GERIATRIC PHARMACOLOGY FELLOWSHIPS. Applications from Board-eligible/Board-certified physicians are solicited for positions starting 1 July 1990 and 1 July 1991 in the Brown University Department of Medicine. Areas of active research emphasis using contemporary techniques in biology include geriatric pharmacodynamics, molecular pharmacology of antineoplastic agents, mechanisms of antihypertensive drug action, and adrenergic nervous system function in disease states. In addition to M.D. and M.D./Ph.D. applicants, highly qualified Ph.D. applicants will be considered. Competitive salary in an outstanding environment. For further information, contact: **Darrell R. Abernethy, M.D., Ph.D., Director, Division of Clinical Pharmacology, Brown University, Department of Medicine, Roger Williams General Hospital, 825 Chalkstone Avenue, Providence, RI 02908.**

POSTDOCTORAL FELLOW PROTEIN ANALYSIS

As a \$3-billion leader in the health care industry, we currently have an opportunity for individual with experience in protein isolation and characterization, HPLC, electrophoresis, and other protein analysis methods.

The position offers a 1-year opportunity to participate in analytical research and development projects supporting the development of therapeutic recombinant protein products. Your responsibilities will include the development of analytical methods for proteins, their degradation products, and the investigation of factors affecting the stability of proteins and peptides.

A Ph.D. in analytical chemistry or biochemistry is required.

For immediate, confidential consideration, send résumé to: **Ms. C. Hampton, Schering-Plough Research, K-6-1 (E-17), 2000 Galloping Hill Road, Kenilworth, NJ 07033. We are an Equal Opportunity Employer.**

GLAXO AND UNIVERSITY OF NORTH CAROLINA (UNC) POSTDOCTORAL FELLOWSHIPS IN CANCER PHARMACOLOGY

Glaxo, Inc., and the Department of Pharmacology of the University of North Carolina announce the availability of competitive postdoctoral fellowships in basic cancer pharmacology research. Fellows will work with a mentor in the Department of Pharmacology at UNC and a co-mentor at Glaxo, Inc., on a project of mutual interest. Research areas include: role of integrins in tumor cell biology; antisense oligonucleotides as therapeutic agents; mechanisms of drug resistance. Fellowships will usually be for 2 years; stipends are competitive with other academic fellowships. Applicants should forward curriculum vitae, statement of research interests, and two letters of reference to: **Cancer Pharmacology Fellowship, Department of Pharmacology, University of North Carolina School of Medicine, 1106 Faculty Laboratory Office Building, Chapel Hill, NC 27599-7365.**

Glaxo and UNC-Chapel Hill are Equal Opportunity/Affirmative Action Employers.

SITUATIONS WANTED

BIOCHEMIST/MOLECULAR BIOLOGIST, Ph.D. Seeks position in academia/industry. Experience in regulation of gene expression, sequence-specific DNA-protein interactions. Box 5, SCIENCE.

CHEMIST, Ph.D. Solid credentials, 19 years. Seeks moonlighting job in New York City/southern Connecticut area. Salary requirements very reasonable. Telephone: 919-929-3229.

M.D., M.B.A., Ph.D., F.A.C.S. Private practice and basic science experience, publications. Interested in a biomedical science (industry/academic) management position. Box 4, SCIENCE.

NEUROSCIENTIST seeks career change. Ph.D., M.S.; neurophysiology, 19 years. Skillful writer, teacher, speaker to technical, legal, lay audiences. Interpersonal adroitness. Box 3, SCIENCE.

Ph.D. (1986). Experience in molecular biology, protein purification, and enzymology. Seeking research position in industry or academia, Box 2, SCIENCE.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP, CLINICAL CHEMISTRY. For individual with a Ph.D. or M.D. and outstanding qualifications. Program offers opportunity to pursue advanced training in a modern, progressive laboratory in an active university medical setting. Please contact: **Dr. Norbert W. Tietz, Department of Pathology, University of Kentucky Medical Center, Lexington, KY 40536.**

PREDOCTORAL FELLOWSHIPS IN WASTE MANAGEMENT

Fellowships for fall 1990 have focus areas in environmental public policy, environmental biotechnology, and waste management technologies. Deadline for receipt of résumé, transcript, GRE scores, and references is 1 March 1990. Write: **Dr. Larry W. Jones, Waste Management Research and Education Institute, 327 South Stadium Hall, The University of Tennessee, Knoxville, TN 37996-0710.**

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

ANNOUNCEMENTS

ARE YOU INTERESTED IN SPACE BIOLOGY?

The advent of the shuttle Program has produced a new era for space biology that offers exceptional opportunities for research. NASA is offering several **RESEARCH ASSOCIATE** awards for scientists to work in laboratories capable of providing scientific advice and facilities relevant to space biology. The awards vary from \$18,000 to \$22,000 based on experience. They are for a 12-month period with the possibility of renewal. Proposals are due 28 February 1990. The funding will begin any time from 1 June to 1 October 1990. Eligible are postdoctoral U.S. citizens. For information, contact: **Dr. X. J. Musacchia, Chairman, NASA Award Committee, Department of Physiology and Biophysics, School of Medicine, Room 1115A, Health Sciences Center, University of Louisville, Louisville, KY 40292, or Dr. Thora W. Halstead, Research Associate Program, Life Sciences Division, NASA Headquarters, Washington, DC 20546.** For application forms, contact: **Dr. Musacchia** at the address above. Telephone: 502-588-5564.

COURSES AND TRAINING

DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOLOGY (MCBP). Interdisciplinary program seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$9000 available on a competitive basis. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

FOSSIL ENERGY POSTGRADUATE RESEARCH PROGRAM. Opportunities at Department of Energy Technology Centers in Morgantown, West Virginia, and Pittsburgh. Research positions in the areas of physical sciences, engineering, and microbiology available. Degree within last 3 years required, as is U.S. citizenship or PRA status. Contact: **Fossil Energy Postgraduate Program, Science/Engineering Education Division, Oak Ridge Associated Universities, Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-3456.**

GRADUATE STUDIES IN BIOCHEMISTRY AND MOLECULAR BIOLOGY DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS AT CHICAGO

Graduate fellowships or assistantships are provided for all students in the program. Research interests include molecular biology and genetics (development and differentiation); signal transduction (hormone action, vision, protein kinases); protein engineering (enzyme active sites and modification); and molecular medicine (heart disease, cancer, muscular dystrophy). For further information and applications, please write or call: **Graduate Committee Chair, Department of Biochemistry (M/C536), University of Illinois College of Medicine, 1853 West Polk Street, Chicago, IL 60612. Telephone: 312-996-7670.**

COURSES AND TRAINING

PREDOCTORAL INTERDISCIPLINARY PROGRAM CELL STRUCTURE AND FUNCTION IN HEALTH AND DISEASE

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

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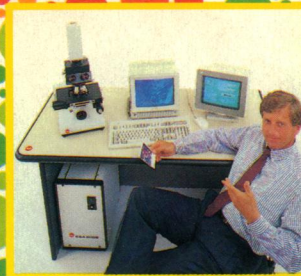
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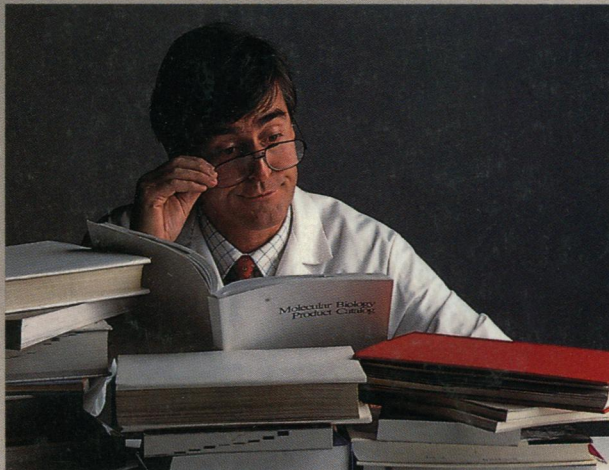
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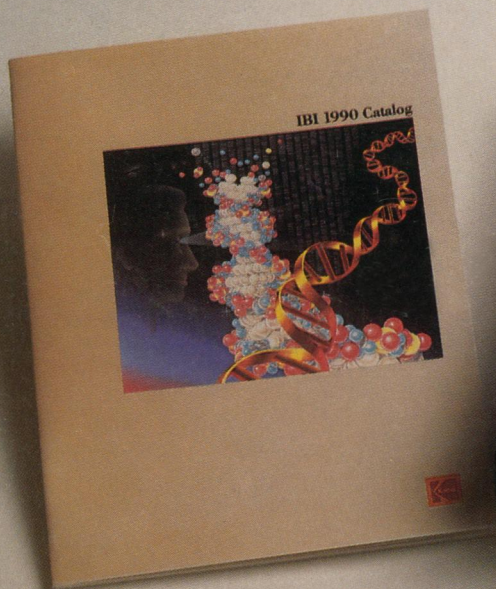
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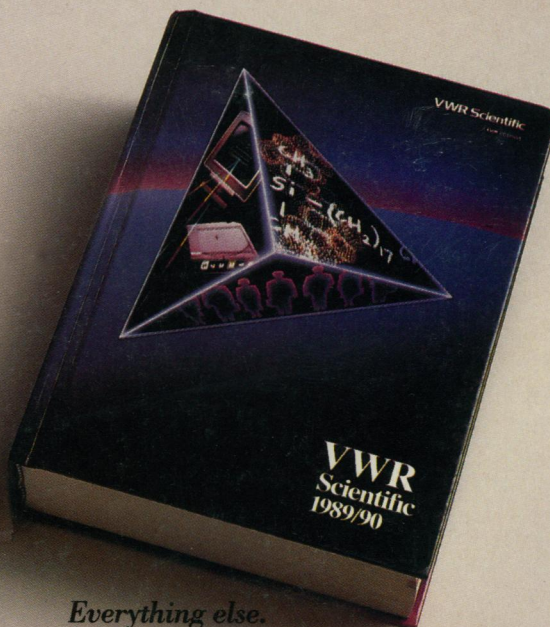
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