

Programmable Electrochemical Detector

Hewlett-Packard has added the HP 1049A programmable electrochemical detector to its range of high-performance liquid chromatography detectors. It can be used for analyses that are normally problematic for electrochemical detection (ECD), such as carbohydrates and catecholamines. Special features have been incorporated to overcome an inherent drawback with ECD—the contamination of the working electrode. The HP 1049A deals with this problem by enabling the user to pretreat the electrode electrochemically before each analysis and to replace the electrode easily and independently of the electrode cell. Hewlett-Packard. Circle 536.

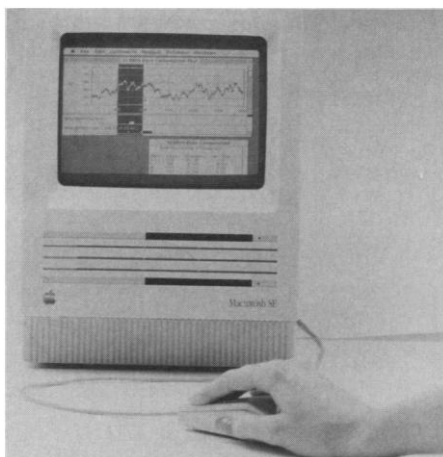
Kit for Measuring Oncogene Proteins

An enzyme-linked immunosorbent assay (Neu ELISA) for the product of the *neu* oncogene is the first commercially available kit for measuring proteins produced by oncogenes. It measures the *neu* protein, which is known for its relation to breast and ovarian cancers. The Neu ELISA is a sandwich immunoassay with two monoclonal antibodies that recognize the extracellular domain of the oncoprotein. The kit's protocol consists of six steps, making it faster and easier than conventional immunoblot assays. Assays can be performed at room temperature with results overnight. Du Pont. Circle 440.

Sequence Analysis Software

MacVector is a new Macintosh program for use in more than 150 DNA sequence and protein applications. MacVector's protein analysis includes secondary structure prediction, hydrophilicity calculations, and antigenic index determinations. It can generate publication-quality graphics or slides as TEXT or PICT files to make them com-

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.



patible with all Macintosh word-processing or desktop publishing programs. International Biotechnologies Inc. Circle 538.

Ground-Water Modeling Software

Two new ground-water modeling programs are available. AQTESOLV is an interactive, menu-driven program for analyzing many different types of aquifer tests. The program offers both manu

Two new ground-water modeling programs are available. AQTESOLV is an interactive, menu-driven program for analyzing many different types of aquifer tests. The program offers both manual on-screen type-curve matching and nonlinear least-squares estimation of aquifer properties. ModelCad is a program to facilitate the design of complex ground-water models by providing an interactive graphical interface for creating model data files. Unlike other preprocessing software, ModelCad stores the design in model-independent format that is then translated into other popular formats such as MODFLOW, PLASM, RANDOM-WALK, and USGS-MOC. The programs run on IBM-compatible microcomputers. Geraghty & Miller. Circle 534.

Small Implantable Osmotic Pump

The Model 1007D ALZET micro-osmotic pump can deliver bioactive compounds to research animals weighing as little as 10 g. Only 17 mm long and weighing just 350 g empty, the Model 1007D is the smallest commercially available infusion pump. Pumping at 0.5 μ l per hour for 7 days, it can deliver peptides, growth factors, cytokines, and other bioengineered molecules frequently used in neuroscience, immunology, and cancer research. The manufacturer ex-

pects the pump to also be useful in marine biology and avian physiology. ALZA Corp. Circle 443.

Monoclonal Antibodies

Polyclonal and monoclonal antibodies (MAb) to human interleukin-1 α (IL-1 α) and anti-human IL-1 β are offered, with MAb isotype γ 1 best suited as a solid-phase capture antibody in enzyme-linked immunosorbent capture assays and isotype γ 2 α best suited in immunoblot techniques. Polyclonals to rabbit anti-human IL-1 and rabbit anti-human IL-1 β and several antibodies to IL-6 are also available. Janssen Biochimica. Circle 445.

Monoclonal antibody against glycophorin-A can be used to obtain purer leukocyte suspension for leukemia phenotyping and research in oncology, hematology, and clinical immunology. Accurate Chemical & Scientific Corp. Circle 446.

Oncoprotein Antibodies are new site-specific probes raised against small synthetic peptides selected from oncoprotein amino acid sequences. Serotec. Circle 447.

Literature

Nalgene Labware 1990 covers the complete line of more than 500 Nalgene products, including 200 pages of product specifications, prices, and expanded technical information. Nalge Co. Circle 563.

Polysciences' 1990-91 Catalog features the company's four main product lines of diagnostics, separation technologies, monomers-polymers, and microscopy. Polysciences. Circle 564.

The *IBI 1990 Catalog* features a line of products for molecular biology and protein biochemistry research. International Biotechnologies Inc. Circle 565.

Ultralow Temperature Freezers are featured in a new 24-page catalog illustrating a complete line. The cabinets have a range down to -96°C. Accessories include alarms, recorders, and inventory control systems. So-Low Environmental Equipment Co. Circle 566.

High-Performance Baths and Circulators from Fisher is a brochure that introduces a full line of this equipment for a wide variety of laboratory needs. Fisher Scientific. Circle 567.

The *1990 Whatman Labsales Catalog* contains more than 200 new products including safety products, plasticware, separation products, and instruments such as centrifuges, thermometers, balances, and water baths. Whatman Labsales. Circle 569.

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 of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

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

AGRICULTURE STUDIES

Hampshire College seeks a scientist trained in sustainable agriculture or agroecology to teach in programs that develop awareness of agricultural issues. We welcome applicants in fields such as: crops research, land management and rotational grazing, animal science, soil biology, and/or food and nutrition. An ability to help students carry out independent projects is essential. Some Third World experience preferred. One-year replacement position (possible 1-year renewal), start fall of 1990. Ph.D. required. Send a résumé, names of three references, and letter of application by 1 April 1990 to: **Laurie Smith, School of Natural Science, Hampshire College, Amherst, MA 01002.** *Hampshire College is an Equal Opportunity Employer. Applications from minorities are especially encouraged.*

AQUATIC ECOLOGIST

The U.S. Geological Survey in Raleigh, North Carolina, seeks an aquatic ecologist to participate in studies concerning the relationships between aquatic biota and water quality in streams and rivers. Candidates should have a Ph.D. in ecology or a related field and education and/or experience in fisheries biology and community analyses. Salary range is \$29,000 to \$46,000 per year. This is a 3-year term appointment with the possibility of conversion to a permanent position. Please submit, by 1 May 1990, an SF-171 or curriculum vitae, a statement of professional interests, college transcripts, and three letters of reference to: **Martin E. Gurtz, U.S. Geological Survey, P.O. Box 2857, Raleigh, NC 27602.** *U.S. citizenship required. U.S. Geological Survey is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR TENURE TRACK

The Nuclear Medicine Section of the Department of Radiology is seeking a tenure-track assistant professor to serve as **ASSISTANT DIRECTOR OF RESEARCH** in the department and to be a major participant in projects concerning the molecular biology of radiation resistance. Research presently involves cloning, characterizing, and transferring of genetic elements responsible for radiation resistance in microorganisms and mammalian cells in culture. A recent Ph.D. with expertise and publications in microbiology/molecular biology would be desirable. An appointment in the appropriate basic science department will be provided. Salary will be commensurate with experience. Send curriculum vitae and three references by 15 April 1990 to:

Glenn V. Dalrymple, M.D.
Director, Section of Nuclear Medicine
Director of Research, Department of Radiology
University of Nebraska Medical Center
600 South 42nd Street
Omaha, NE 68198-1045

The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer, M/F/H/V.

PROFESSOR OF TOXICOLOGY LABORATORY OF TOXICOLOGY HARVARD SCHOOL OF PUBLIC HEALTH

The Laboratory of Toxicology is searching for a tenured professor of toxicology. Candidates or nominees should have an exceptional record of accomplishment in innovative science. They should have research interests in the molecular, genetic, or cellular mechanisms of toxicity, and complement the existing faculty whose interest include the molecular mechanisms of mutagenesis, DNA repair genes, receptor-mediated toxicity, chemical carcinogenesis and tumor promotion, cell cycle regulation, and physiological and genetic responses to oxidative stress and other DNA-damaging agents. The successful candidate will be expected to participate in graduate student teaching and mentoring, and the training of postdoctoral fellows.

Send curriculum vitae, a summary of research interests, and up to eight representative reprints to:

Professor Armen H. Tashjian, Jr.
Laboratory of Toxicology
Harvard School of Public Health
665 Huntington Avenue
Boston, MA 02115

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

POSITIONS OPEN

The Department of Chemistry of Yale University solicits applications for a tenured position in organic chemistry at the level of **PROFESSOR** in the discipline of complex synthesis, synthetic methods, and/or bioorganic chemistry as they are broadly defined. An outstanding teacher-scholar's research interests should complement the current faculty. The position is expected to be filled for the academic year 1991.

Applicants should submit curriculum vitae and a list of publications to: **Professor F. E. Ziegler, Chairman, Senior Organic Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, Box 6666, New Haven, CT 06511-8118** before 30 April 1990. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR (WILDLIFE). Nine-month, tenure-track position to begin 30 June 1990. Ph.D. (expertise in forest wildlife management and mammalian ecology) required to teach 2½ courses per year, develop funded research, and participate in extension activities. Person with strong record of field research, association with state and federal natural resources agencies, success in university level teaching, and creativity through refereed publications. Salary commensurate with qualifications. Send letter of application, including statements of teaching and research goals, curriculum vitae, university transcripts, and three letters of recommendation to: **Dr. Curtice Griffin, Chair, Search Committee, Department of Forestry and Wildlife Management, University of Massachusetts, Amherst, MA 01003** by 6 April 1990. **Telephone: 413-545-2757.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR YALE UNIVERSITY SCHOOL OF MEDICINE SECTION OF NEUROANATOMY

An assistant professor position is open for individuals with strong backgrounds in electrophysiology of sensory transduction and second messenger mechanisms in chemoreceptors, particularly using patch-recordings and cell isolation techniques. The successful candidate will be expected to engage in an ongoing multidisciplinary program as well as to develop an independent research line with independent external grant support. The candidate is also expected to teach graduate and medical students. Curriculum vitae, statement of research interests, and names of three references, should be sent before 15 April 1990 to: **Chairman, Section of Neuroanatomy, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510-8026.** *Yale University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR PROTEIN BIOPHYSICAL CHEMIST

The Department of Pharmaceutical Chemistry (pharmaceutics) at The University of Kansas invites applications for a tenure-track position starting 1 January 1991 or 15 August 1990, if possible. Applicants should be experiment-oriented chemists or biochemists who can apply modern physicochemical techniques to study protein structure.

Applicants are expected to possess, or earn in the immediate future, a Ph.D. degree in pharmaceuticals, biochemistry, chemistry, or a closely related area. Preference will be given to applicants with educational background or research experience in the pharmaceutical sciences. Applicants should have a demonstrated ability to communicate effectively, a genuine interest in teaching, and have shown exceptional research capability and potential. The faculty member will have teaching responsibilities at the undergraduate and graduate levels and will be expected to develop a strong, independent research program.

Applications should include curriculum vitae, letters from three references, and a short statement of future research interests. Applications received by 15 April 1990 will receive first consideration; however, applications will be accepted until 15 October 1990 and will be reviewed monthly. Send applications to:

Dr. Ronald T. Borchardt
Department of Pharmaceutical Chemistry
3006 Malott Hall
The University of Kansas
Lawrence, KS 66045

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

POSITIONS OPEN

ASSISTANT PROFESSOR CARDIOVASCULAR PHARMACOLOGY

The Department of Pharmacology and Toxicology at Michigan State University (MSU) invites applications for a tenure-track position for a cardiovascular pharmacologist. Approval for this position is pending. Applicants must have a Ph.D. in pharmacology/physiology or an M.D. with two or more years of relevant postdoctoral experience. The successful candidate will be expected to establish an independent research program and contribute to the teaching of graduate and medical students. Applicants should send curriculum vitae, a short summary of research plans, and the names of three references to: **Chairman, Search Committee, Department of Pharmacology/Toxicology, Michigan State University, B440 Life Sciences, East Lansing, MI 48824.** Applications should be received by 31 May 1990 (please refer to position **HM#604** when responding). *MSU is an Affirmative Action/Equal Opportunity Institution.*

ASSISTANT PROFESSOR OF MEDICINAL CHEMISTRY. Tenure track. Ph.D. and postdoctoral experience required. Preference to candidates with biochemical expertise (peptide drugs, applications of molecular biology to medicinal chemistry) or biophysical expertise (NMR spectroscopy, computer graphics). Development of a strong research program and teaching at both undergraduate and graduate levels is expected. Send curriculum vitae and a summary of a research proposal, and have three letters of recommendation sent to: **Dr. Sidney D. Nelson, Department of Medicinal Chemistry, BG-20, School of Pharmacy, University of Washington, Seattle, WA 98195** by 1 June 1990. *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR

M.D. or Ph.D. in cell biology. Must have background in immunology, ocular pathology, and experience with microsurgery of the eye in rodents. Independent investigator capable of directing teaching, research, and preparing manuscripts and grants. Send curriculum vitae, publications list, and names and addresses of three references to:

**James P. McCulley, M.D., Professor and Chairman
Department of Ophthalmology
University of Texas
Southwestern Medical Center
5323 Harry Hines Boulevard
Dallas, TX 75235-9057
Telephone: 214-688-3407
*Equal Opportunity Employer.***

ASSISTANT PROFESSOR REPRODUCTIVE ENDOCRINOLOGIST

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 reproductive endocrinologist. Individual should be willing to spend a significant portion of time working in an already established in vitro fertilization program.

Interested persons please apply by 15 May 1990 to: **Brent Bodily, Executive Administrator, Department of Obstetrics and Gynecology, UAB Station, Birmingham, AL 35294.** *An Equal Opportunity/Affirmative Action Employer.*

University of California, San Diego (UCSD). An **ASSISTANT PROFESSOR** is sought with expertise in bioengineering and/or experimental biophysics. The applicant should be prepared to establish a program of independent research in areas such as tissue and cell physiology, microcirculation, biomechanics, biophysics, biosensors, and/or biological mass transfer. The successful candidate will be responsible for teaching at the undergraduate and graduate levels in the bioengineering program. One of the teaching requirements is an undergraduate course in electronics applied to bioengineering. Qualifications include a Ph.D. in an appropriate field. Salary commensurate with qualifications based on University of California pay schedule. Please send résumé, samples of publications, and names and addresses of at least three references before 1 June 1990 to: **Dr. Shu Chien, Chair, R-012, AMES-Bioengineering, UCSD, La Jolla, CA 92093-4012.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

The Department of Biology at Morehouse College invites applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level for an environmental biologist. Applicants must hold a Ph.D. in either ecology or environmental science. Teaching responsibilities will include a general course in ecology for seniors and a topics course in environmental biology for juniors and seniors. Faculty members are expected to maintain active research programs which involve undergraduate and graduate students. Closing date: 12 May 1990 or until suitable candidates are found. Applicants should submit their curriculum vitae, graduate school academic transcript, and a statement of teaching and research goals, and arrange to have three letters of recommendation sent to: **Dr. J. K. Haynes, Chairman, Department of Biology, Morehouse College, 830 Westview Drive, S.W., Atlanta, GA 30314.** *An Equal Opportunity/Affirmative Action Employer.*

The Department of Biology at Morehouse College invites applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level for an anatomist/developmental biologist to begin in September 1990. Applicants must hold a Ph.D. degree in either anatomy, developmental biology, or cell biology and must be proficient in the use of the electron microscope. Teaching responsibilities will include an invertebrate and vertebrate anatomy course for sophomores and an embryology course for juniors and seniors. Faculty members are expected to maintain active research programs which involve undergraduate and graduate students. Closing date: 12 May 1990 or until suitable candidates are found. Applicants should submit their curriculum vitae, graduate school academic transcript, and a statement of teaching and research goals, and arrange to have three letters of recommendation sent to: **Dr. J. K. Haynes, Chairman, Department of Biology, Morehouse College, 830 Westview Drive, S.W., Atlanta, GA 30314.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT/ASSOCIATE/FULL PROFESSOR. Plant structure and function. The Department of Ecology and Evolutionary Biology at The University of Connecticut invites applications for an anticipated assistant, associate, or full professorship in the field of plant structure and function. We are searching for an organismal botanist with an ecological or evolutionary perspective. Research areas of interest include, but are not limited to, plant development, functional morphology, biomechanics, and paleobotany. The successful candidate will be expected to initiate a vigorous research program and show a commitment to teaching by participating in the introductory biology program and developing advanced courses appropriate to his or her specialty. Applicants should submit curriculum vitae, a statement of research interests, reprints, and at least three letters of reference by 10 April 1990 to: **John Silander, Plant Structure and Function Search Committee, Department of Ecology and Evolutionary Biology, U-43, The University of Connecticut, Storrs, CT 06269-3043.** *The University of Connecticut is an Affirmative Action/Equal Opportunity Employer. (Search #0A205.)*

ASSISTANT, ASSOCIATE, OR FULL PROFESSOR OF PHARMACOLOGY

The Department of Pharmacology at the Northeastern Ohio Universities College of Medicine invites applications from individuals with strong research credentials in CNS pharmacology for a tenure-track position, available immediately, at the level of assistant, associate, or full professor. Applicants must have a Ph.D. in pharmacology, have completed not less than 2 years of postdoctoral training, and have demonstrated ability to conduct independent research. Some teaching experience is desirable since the position requires participation in teaching of medical and graduate students. Senior candidates will have had commensurate experience and will have established careers as investigators. The medical school is housed in a modern facility on 55 acres and is in close proximity to a wide variety of living styles. Many opportunities are available in the geographic area for academic and scientific interactions. Send curriculum vitae including the names of three references by 20 April 1990 to: **Dr. Martin D. Schechter, c/o the Office of Human Resources, Northeastern Ohio Universities College of Medicine, P.O. Box 95, Rootstown, OH 44272.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

VISITING ASSISTANT PROFESSOR OF BIOLOGY

The College of William and Mary invites applications for a 1-year appointment to replace faculty on leave. The successful applicant will teach one course in animal physiology and another in an area of vertebrate biology. Research space will be provided. Applicants must include curriculum vitae and the names, addresses, and telephone numbers of three references. Applications should be addressed to: **Eric Bradley, Department of Biology, College of William and Mary, Williamsburg, VA 23185.** Reviews of applications will begin 2 April 1990. *The College of William and Mary is an Affirmative Action/Equal Opportunity Employer.*

CLINICAL BIOCHEMISTRY MOLECULAR BIOLOGIST

Wanted: an M.D. or Ph.D. molecular biologist with an interest in signal transduction and/or molecular endocrinology as it applies to human disease. The successful candidate will be appointed as **ASSISTANT PROFESSOR** at the University of Toronto, Department of Clinical Biochemistry, and will be expected to teach, supervise graduate students, and participate in the activities of the graduate school and generate independent research funds. Send curriculum vitae and names of at least three referees to:

**Dr. Andrew D. Baines, Biochemist-in-Chief
Department of Clinical Biochemistry
The Toronto Hospital
200 Elizabeth Street
Toronto, Ontario, Canada M5G 2C4**

HLA LABORATORY DIRECTOR

The Department of Pathology, University of Utah Medical Center, is seeking a full-time faculty member at the **ASSISTANT OR ASSOCIATE PROFESSOR** level (M.D. or Ph.D.) to direct an HLA laboratory to support active programs in heart, liver, kidney, and bone marrow transplantation. Applicants should be experienced in the molecular biology of HLA and have a strong research interest in this area. Individuals desiring to be considered for this position should submit curriculum vitae to:

**Carl R. Kjeldsberg, M.D.
Professor of Pathology
Department of Pathology
University of Utah School of Medicine
50 North Medical Drive
Salt Lake City, UT 84132**

Applications will be considered until 1 April 1990 or until a qualified candidate is identified. *The University of Utah is an Equal Opportunity Employer which encourages applications from minority groups and women.*

HARVARD UNIVERSITY DEPARTMENT OF ORGANISMIC AND EVOLUTIONARY BIOLOGY

The department wishes to appoint a **MOLECULAR EVOLUTIONIST** pursuing experimental studies on the forces and patterns of molecular evolution, including but not restricted to: (i) studies of mutations and functional and selective constraints on DNA sequences within species; (ii) studies of general patterns of DNA sequence evolution and general constraints on these patterns (nearest neighbor corrections, codon bias, mutational patterns); (iii) evolution of gene and genome structure (genetic exchange, mobile elements, evolution of intron/exon structure, duplication, gene loss, pseudogenes, etc.); (iv) evolution of entire genomes (plastid genomes, mitochondrial genomes, etc., and their relation to the nuclear genome). This search does not cover systematic studies aimed at elucidating the evolution of particular groups. Separate appointments are being made in molecular systematics.

An appointment can be made at a tenured or nontenured level depending upon the qualifications of the candidate.

Applications and letters from referees should be sent before 31 March 1990 to:

**R. C. Lewontin, Chair of Search Committee
Museum of Comparative Zoology
Cambridge, MA 02138**

Women and minority candidates are especially encouraged to apply. Harvard is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGY

Applications are invited for a 1-year temporary position as an **ASSISTANT PROFESSOR** of biology. Starting August 1990 and ending April 1991. Teaching responsibilities include courses in genetics and ecology at both the major and nonmajor levels. Candidates with a Ph.D. will be given preference. Position open until filled. Send detailed curriculum vitae and names, addresses, and telephone numbers of three references to: **Lawrence Fitzpatrick, Director of Personnel, Saginaw Valley State University (SVSU), University Center, MI 48710.** SVSU is an Equal Opportunity/Affirmative Action Employer.

BIOLOGIST/TOXICOLOGY COORDINATOR.

A tenure-track position at the **ASSISTANT PROFESSOR** level will be available 1 September 1990 to coordinate a B.S. program in toxicology. Responsibilities include: teaching undergraduate courses in toxicology and biology, toxicology student advisement, development of an active research program, and committee participation. The responsibilities will be divided approximately equally between biology and toxicology. Applicants must have a Ph.D. in the biological sciences or in toxicology with a strong background in eukaryotic organismic biology and toxicology, including extensive graduate level course work in organismic biology and research experience in toxicology. Application review will begin on 5 April 1990. Send résumé and transcripts to: **Dr. Larry Cribben, Biology Department, Montclair State College, Upper Montclair, NJ 07043.**

CLINICAL BIOCHEMISTRY AND BANTING AND BEST DIABETES CENTRE MOLECULAR GENETICIST

The Department of Clinical Biochemistry and the Banting and Best Diabetes Research Centre at the University of Toronto invite applications from molecular geneticists with research interests related to diabetes. The successful applicant will be appointed as **ASSISTANT PROFESSOR** to join a group of independently funded investigators working on the molecular biology of signal transduction and growth factors with special reference to diabetes. Initial appointment will be for 5 years and is renewable at least once. Applicants should hold Ph.D. or M.D. degree(s) with several years of postdoctoral experience in molecular genetics and will be expected to generate independent research funding and participate in teaching and supervise graduate students and may participate in the teaching of medical students in areas related to research, endocrinology, and metabolism. *This advertisement is directed to both male and female Canadian citizens and permanent residents.* Send detailed curriculum vitae and names of at least three references to:

Dr. Andrew D. Baines, Professor and Chairman
Department of Clinical Biochemistry
100 College Street
University of Toronto
Toronto, Ontario, Canada M5G 1L5

DIRECTOR CLINICAL CYTOGENETICS LABORATORY VANDERBILT UNIVERSITY MEDICAL CENTER

The Department of Pathology and Diagnostic Laboratories of Vanderbilt University Medical Center, Nashville, Tennessee, invite applications for director of the Clinical Cytogenetics Laboratory. Academically oriented individuals with an M.D. and/or Ph.D. degree and several years of postgraduate experience in clinical cytogenetics are encouraged to apply. Applicants must be Board-eligible or -certified by the American Board of Cytogenetics. Primary responsibilities include supervision of the Clinical Cytogenetics Laboratory, development of an independent research program, and teaching medical students, residents, and fellows. Opportunity for collaborative research with a variety of clinical specialties is available. Faculty rank and salary will be commensurate with experience. Please send curriculum vitae with brief statement of professional goals to:

Fred Gorstein, M.D., Chairman
Department of Pathology
C-3322 Medical Center North
Vanderbilt University Medical Center
Nashville, TN 37232

Vanderbilt is an Affirmative Action/Equal Opportunity Employer.

16 MARCH 1990

* ANIMAL ECOLOGISTS ** PLANT ECOLOGISTS *

EG&G is seeking animal ecologists to participate in research investigating the effects of energy related development on the endangered San Joaquin kit fox, giant kangaroo rat, Tipton's kangaroo rat, and blunt-nosed leopard lizard at the Elk Hills Naval Petroleum Reserve, California. Four plant ecologists, one animal ecologist, one field herpetologist and 20 analysts are needed to characterize impacts of Department of Energy activities on endangered plants and animals and other important species on the Nevada Test Site.

The minimum requirement for an entry level position in Animal Ecology is a B.S. degree in biology, zoology, wildlife management or related field. Minimum requirements for senior level positions are a B.S. degree in one of the above disciplines plus 3-5 years experience. Senior applicants must also have demonstrated ability to design, implement and manage multidisciplinary research projects and have knowledge of environmental laws and regulations as they may apply to endangered species and environmental protection. Work location is near Bakersfield, CA.

The minimum requirements for the Plant Ecologist positions are a B.S. degree in soils, botany, biology or range management, 2 years experience working in field biology, experience in soils profile description and top soil salvaging, and experience in plant identification. The minimum requirement for the Field Herpetologist and Animal Ecologist positions are a B.S. degree in wildlife zoology or related field, plus experience in designing and implementing field studies. Work location is Las Vegas, Nevada.

The minimum requirements for an Analyst position is 2 years college classes in biology, zoology, environmental science, or natural resources. Will assist in the collection of data for interdisciplinary plant and animal studies at the Nevada Test Site and surrounding locations. Work will consist of establishing sample locations, measuring attributes of plant and animal populations and communities. This includes sampling soil, clipping vegetation, walking transects, and handling wild animals. Work location is Las Vegas, Nevada.

A pre-employment physical which includes drug and alcohol screening and a U.S. citizenship are required. An equal opportunity employer. Candidates send resumes and example of written material to:



EG&G ENERGY MEASUREMENTS
Santa Barbara Operations
Attn: Technical Recruiting
130 Robin Hill Road
Goleta, CA 93117

Senior Scientist/Group Leader

As A Member Of Our Hepatitis Research And Development Group, Your Achievements Will Always Be Recognized.



Ortho Diagnostic Systems Inc. is a member of the Johnson & Johnson Family of Companies and a world leader in the development and manufacture of medical diagnostics, reagents, immunologicals and related materials. Our ongoing efforts to provide accurate testing for a variety of serious medical conditions have created an opportunity for an individual to participate in the development of test kits for Hepatitis.

Working as a Senior Scientist/Group Leader, you will be responsible for developing immunoassays for hepatitis viruses (HBV and HCV). In addition, you will establish and coordinate research collaborators with external investigators working in a variety of areas. The position will also have supervisory responsibility.

The position requires a Ph.D. in Virology, Immunology, or Biochemistry along with 3-5 years industrial experience in developing immunoassays for HBV.

We offer highly competitive salaries and the full complement of Johnson & Johnson benefits including dental plan, tuition reimbursement and our on-site total health facility, the Live For Life Wellness Center. If you see yourself contributing to the answers of the future, send your resume and salary history in confidence to: Human Resources Dept. CWMN,



Ortho Diagnostic Systems Inc.

a Johnson & Johnson company

Box B, Raritan, NJ 08869

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

POSITIONS OPEN

ENVIRONMENTAL PLANT PHYSIOLOGIST

Academic career-track, 11-month position as an environmental plant physiologist in the Department of Botany and Plant Sciences, University of California, Riverside, at the assistant or associate level, available on or after 1 July 1990. The position is 60% cooperative extension and 40% in the Statewide Air Pollution Research Center, and is based at the Kearney Agricultural Center in the San Joaquin Valley near Fresno. Responsibilities include conducting research on the effects of air pollution on crop plants and the impacts of agricultural practices on air quality in the San Joaquin Valley. An education program would be conducted to advise local, county, and state agencies and farm advisers and growers on these problems, and methods for overcoming them. The position may include participation in graduate programs. Requires a Ph.D. emphasizing plant physiology, research experience in plant responses to environment, and effective skills in organization and communication. Send letter of application, curriculum vitae, statement of research interest, and transcripts, and arrange to have at least three confidential letters of evaluation sent to: **Dr. A. E. Hall, Chair, Search Committee, Department of Botany and Plant Sciences, University of California, Riverside, CA 92521.** The application deadline is 30 April 1990. *The University of California, Riverside, is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

ASSISTANT DIRECTOR OF BLOOD BANK

The Department of Pathology, University of Utah Medical Center, seeks a full-time faculty member at the **ASSISTANT OR ASSOCIATE PROFESSOR** level (M.D. or Ph.D.) with experience in bone marrow processing and storage to support a new bone marrow transplantation program. Applicants should have a strong research interest in hematopoietic growth factors, immunohematology, or the molecular genetics of the HLA system. Individuals desiring to be considered for this position should submit curriculum vitae to:

Carl R. Kjeldsberg, M.D.
Professor of Pathology
Department of Pathology
University of Utah Medical Center
50 North Medical Drive
Salt Lake City, UT 84132

Applications will be considered until 1 April 1990 or until a qualified candidate is identified. *The University of Utah is an Equal Opportunity Employer which encourages applications from minority groups and women.*

Florida statewide **ECOLOGIST**, The Nature Conservancy. Scientist needed to oversee monitoring and research programs on TNC preserves; coordinate data analysis and publish research results; act as liaison to academia. Will train staff in monitoring techniques for sound land management. Will prepare grants to further program. Ph.D. preferred in plant ecology or related field with 3 to 5 years of experience. Send résumé and cover letter to: **Jora Young, Director of Science and Stewardship, The Nature Conservancy, 1353 Palmetto Avenue, Winter Park, FL 32789.**

ENTERIC NEUROBIOLOGIST

The Department of Biomedical Sciences (Division of Physiology and Pharmacology) at McMaster University invites applications for **ASSISTANT PROFESSOR**. This is a 3-year, contractually limited position commencing 1 July 1990. Applicants should have a Ph.D. or equivalent and experience in electrophysiology of the nervous system intrinsic to the gastrointestinal tract, including patch clamp techniques on enteric nerves. Experience with electrophysiological techniques pertaining to the CNS would be a definite asset. The successful candidate will become a member of the Smooth Muscle Research Program and the Intestinal Disease Research Unit and will also be expected to participate in the undergraduate and graduate teaching programs of the university. Salary to be commensurate with experience.

Applications, including curriculum vitae and names of three referees, should be received by 30 April 1990 by: **Dr. A. J. McComas, Chairman, Department of Biomedical Sciences, McMaster University, 1200 Main Street West, Hamilton, Ontario, L8N 3Z5 Canada.**

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

POSITIONS OPEN

CYTOGENETICIST. The Department of Pediatrics is seeking a Board-certified/-eligible cytogeneticist to assist in the direction of a full-service clinical cytogenetics laboratory. Initial appointment at the **INSTRUCTOR** level. Responsibilities include the development of a research/clinical molecular cytogenetics section. Teaching experience and experience with molecular genetic techniques (particularly polymerase chain reaction and in situ hybridization) are required. Candidates should submit a letter of application, curriculum vitae, and the names and addresses of three references to: **Dr. Kathleen Rao, Department of Pediatrics, CB #7220, University of North Carolina (UNC-CH), Chapel Hill, NC 27599-7220.** Application deadline: 20 April 1990. *Women and minorities are encouraged to identify themselves voluntarily. UNC-CH is an Equal Opportunity/Affirmative Action Employer.*

HEAD, DEPARTMENT OF BIOLOGY JACKSONVILLE STATE UNIVERSITY

The Department of Biology invites applications for the position of head of the Department of Biology. Candidates must hold an earned doctorate in the biological sciences, be eligible for the rank of **ASSOCIATE OR FULL PROFESSOR**, and have an established record as a scholar and teacher in any field of biology. Preference will be given to candidates who have demonstrated leadership ability and grantsmanship. Salary and fringe benefits are competitive. The effective date of appointment is 1 September 1990. Review of the applications will begin 15 April 1990 and continue until the position is filled. A letter of application, curriculum vitae, and three letters of reference including telephone numbers should be sent to: **Office of Personnel, Jacksonville State University, Jacksonville, AL 36265.** *An Equal Opportunity/Affirmative Action Employer.*

EVOLUTIONARY/ECOLOGICAL GENETICIST. The Department of Biological Sciences at the University of Windsor invites applications for a tenure-track position. The successful applicant must have a Ph.D. and an established, externally funded research program involving natural populations. Preference will be given to those individuals investigating the genetic structure and dynamics of natural populations. Duties will include participating in the teaching of genetics, evolution, possibly limnology, and/or other senior graduate courses in the candidate's area of specialization and directing graduate students at the M.Sc. and Ph.D. levels. This position is available 1 July 1990; starting date is negotiable. The university intends to fill positions with **ASSISTANT PROFESSORS** whenever possible. Please send curriculum vitae and the names of three referees by 15 April 1990 to: **Dr. M. L. Petras, Department of Biological Sciences, University of Windsor, Windsor, Ontario, Canada N9B 3P4.** FAX: 519-973-7050. *The university is committed to Equity in Employment; female candidates are especially encouraged to apply. In accordance with Canadian immigration requirements, this advertisement is directed, in the first instance, to Canadian citizens and permanent residents.*

OCEAN STUDIES FACULTY

Maine Maritime Academy's recently established Department of Ocean Studies seeks the following full-time faculty to begin the fall semester, starting 1 September 1990. **ASSISTANT OR ASSOCIATE PROFESSOR** to teach required and elective courses in marine and basic science field of expertise. Areas of knowledge and expertise required in at least one of the following areas: chemical, physical, biological, or geological marine science. The primary focus of the Ocean Studies Department is undergraduate teaching; however, the candidate will be expected to establish an active research program that has potential for undergraduate student involvement. Ph.D. required, and previous college teaching experience desired. **LABORATORY INSTRUCTOR** to instruct laboratories for marine science, biology, and basic chemistry courses. Also responsible for overseeing laboratory preparation, maintenance, and safety. Bachelor's degree in biological or marine sciences required. Master's degree and previous teaching experience desired. Send letter of application, curriculum vitae, and three professional references to: **Kathy Quinn, Human Resources Director, Maine Maritime Academy (MMA), Castine, ME 04420.** *MMA is an Equal Opportunity Employer.*

POSITIONS OPEN

A four-year public institution with campuses on St. Thomas and St. Croix, U.S. Virgin Islands, serving full-time and part-time students, announces a **FACULTY VACANCY** in the Science and Math Division effective 15 August 1990: **VISITING ASSISTANT OR VISITING ASSOCIATE PROFESSOR** of biochemistry (renewable).

A doctorate in biochemistry and ability to teach biochemistry and cell biology as well as an introductory chemistry course for nursing students and other courses depending on background and interest in research with undergraduates required.

Salary range is \$29,358 to \$48,525 depending on rank and experience. To apply for the position, send letter of application, up-to-date résumé, official transcripts, and three letters of recommendation by 30 March 1990 to: **Dr. William MacLean, Vice President for Academic Affairs, University of the Virgin Islands, Charlotte Amalie, St. Thomas, VI 00802.** (Late applications accepted until position is filled.)

An Equal Opportunity/Affirmative Action Employer and Educator.

The Department of Pathology at the University of California, San Diego (UCSD), is seeking **TWO FULL-TIME FACULTY** in surgical pathology/cytopathology with rank and series commensurate with the qualifications and experience of the candidates. Candidates must be eligible for licensure in California and Board certification in either anatomic pathology or AP/CP. Skill in fine needle aspiration is desirable. The positions require clinical service, research, and teaching of medical students and residents. Salary will be commensurate with level of appointment and current UCSD School of Medicine pay scale. Applicants should submit curriculum vitae and names of six referees to: **David N. Bailey, M.D., Professor and Chairman, Department of Pathology, UCSD Medical Center (H-720-T), 225 Dickinson Street, San Diego, CA 92103,** by 6 April 1990. *Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION. Available immediately. Applications are sought for an **ASSISTANT PROFESSOR** to join a research program in one of the following NK cell areas: cellular receptors and stimulus/transduction mechanisms, regulation by cytokines, ontogenic development. Applicants must have a demonstrated ability to conduct high-quality research and have at least 3 years of experience. Curriculum vitae, bibliography, and the names of three references should be sent to: **Chief, Section of Natural Immunity, Box 18, The University of Texas, M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** *We are an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS DEPARTMENT OF MICROBIOLOGY NEW YORK UNIVERSITY SCHOOL OF MEDICINE

The Department of Microbiology of New York University (NYU) School of Medicine is seeking to fill several tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level within the next 2 years. We are particularly interested in attracting outstanding researchers with a Ph.D. or M.D. degree working in the fields of animal virology, oncogenes, growth factors and their receptors, and bacterial pathogenesis, but will also welcome applications from individuals interested in the molecular analysis of gene expression and function in general. Participation in the department's graduate teaching is expected. Salary is open and dependent upon experience and qualifications, and start-up funds are available.

The Department of Microbiology is located in the Medical Science Building at NYU Medical Center, and comprises at present a group of faculty with diverse research interests including the mechanism of action of cytokines and growth factors, mechanisms of microbial pathogenicity, regulation of gene expression in bacteria and animal cells, molecular genetics, etc. The department has an active graduate training program and also participates in the Kaplan Cancer Center and the Center for AIDS Research. Both of these centers are interdisciplinary NIH-funded programs.

Applicants should send their curriculum vitae, names of three references, and a brief statement of research interests to: **Dr. Claudio Basilico, Professor and Chairman, Department of Microbiology, NYU Medical Center, 550 First Avenue, New York, NY 10016.** *NYU is an Equal Opportunity Employer.*

**National Institutes of Health
Public Health Service
Department of Health and Human Services**

The National Institutes of Health (NIH) invites nominations and applications for the position of **Associate Director for Disease Prevention**. This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from the ES-1 to ES-4 pay level per annum. The person selected may be eligible for Physician's Comparability Allowance ranging \$5,000 to \$20,000 per year. A one year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Associate Director for Disease Prevention provides leadership and coordination of biomedical programs that seek to improve the Nation's health through research, research training, and the exchange of knowledge as these activities relate to disease prevention, effects of nutrition on health and progression of disease, and medical applications of biomedical research.

For more information, contact Dr. Paul Thibault at (301) 496-6521. The following forms are required: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These must be submitted to:

**Dr. Paul Thibault
National Institutes of Health
Office of the Director Personnel
Building 31, Room 1C-23
9000 Rockville Pike
Bethesda, Maryland 20892**



Applications must be postmarked no later than April 9, 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

ASSOCIATE EDITOR

We're looking for a PhD biochemist/molecular biologist with a broad range of interests and research experience in one or more of the following areas: signal transduction, intracellular molecular trafficking, or structural biophysics. Requirements include at least two or three years of post-doctoral experience and publications in the refereed literature.

Science editors have varied responsibilities in manuscript selection ranging from editing for clarity to soliciting papers. Previous editorial experience is not required. This is a full-time position in our Washington offices.

Please send resume and list of publications with cover letter and salary requirements to:

**Mr. Gregory Stokes
AAAS
1333 H Street, NW
Washington, DC 20005**

EOE

**DIRECTOR
PRIMATE RESEARCH INSTITUTE
NEW MEXICO STATE UNIVERSITY**



New Mexico State University (NMSU) seeks qualified candidates for the position of Director. The Primate Research Institute (PRI) is located within the security of Holloman Air Force Base, close to Alamogordo in southern New Mexico. The PRI has a complete on-site laboratory complex of 100,000 square feet to support its research studies that includes 8 buildings located on a 37-acre site and supports a colony of 300 chimpanzees and 1300 rhesus monkeys.

Research is being conducted in the area of comparative and reproductive toxicology, virology, metabolism, pharmacokinetics, and reproductive biology. The PRI is a key element in the conduct of the National AIDS virus research program. Product testing in animals is also an area of primary interest to PRI and includes animal model development for biomedical research and for testing biomedical materials and devices. The affiliation with NMSU, a major land grant university, provides many opportunities for collaboration, consultation, and participation with the main campus in graduate-level teaching and research programs.

The Director is responsible to the Vice President for Research and Economic Development for all aspects of execution of the PRI program, which has a budget in excess of \$10 million annually and requires management of a total staff of nearly 150 scientists, laboratory and animal technicians, and support personnel. Major duties are program planning and the identification and development of research support to include negotiation with federal agencies, foundations, and industrial organizations; program direction and oversight of the scientific efforts to assure appropriate application of new discoveries and their exploitation; resource management of personnel, facilities, and funds with complete accountability for the financial operations of PRI; administrative leadership to maintain a professional environment that promotes the NMSU policies governing affirmative action and equal employment opportunity; and scientific leadership to establish the technical program framework for research expansion and to maintain liaison with scientific peers as well as business and community leaders in furthering the interests of PRI.

The person sought for this position will lead with vision and creativity in addressing the goals of PRI and should possess the following qualities: background of successful leadership and management of a principal science and technology activity in a university, industry, or government; record of outstanding research with national recognition; demonstrated ability to secure funding for research; sensitivity with issues concerning staff and the external community; effective oral and written communication skills; and a commitment to affirmative action. Candidates for the position must have a PhD, DVM, or equivalent in one of the disciplines cited or a closely related area. Experience with primates is desirable. Salary is competitive and commensurate with qualifications and experience.

Send letter of application, including vita and a brief statement of interest, and have three letters of reference forwarded to

**Dr. Robert E. Weigle
Chair, PRI Director Search Committee
New Mexico State University
Box 30002
Las Cruces, NM 88003**

Applications must be postmarked no later than April 16, 1990.

NMSU is an equal employment opportunity/affirmative action employer. Minorities and women are encouraged to apply.



Environmental Sciences

NSI Technology Services Corporation, a nationwide environmental sciences organization, is seeking a qualified candidate for a position in our Toxic Hazards Research Unit in Dayton, Ohio. Applicants are being sought for the following position:

Analytical Chemistry Group Leader

Position requires a Ph.D. or equivalent with at least five years' experience in supervising a research group. Responsibilities will include planning, implementing, directing, and controlling the research efforts of scientific professionals engaged in applied research related to the evaluation of materials of interest to the Government. Experience in the toxicological evaluation of organic materials is desired. The position requires a strong, comprehensive background in analytical chemistry and separations science with particular emphasis on trace level analytical techniques. The successful candidate will serve as the focal point for serving the analytical needs of the toxicology and pharmacokinetic modeling research programs. Salary level negotiable depending on experience and qualifications.

NSI offers competitive salaries, a complete benefits package, and excellent growth potential. Interested individuals should submit a résumé including salary requirements, in confidence to:

Ms. Lois Doncaster
Human Resources/26

NSI Technology Services Corporation Environmental Sciences

A Subsidiary of ManTech International Corporation

101 Woodman Dr., Suite 12
Dayton, Ohio 45431

NSI Technology Services Corporation is an Equal Opportunity Employer

Research & Development Manager of Formulation Development

Baxter Healthcare Corporation, MicroScan Division, develops and manufactures computer controlled electronic instrumentation and disposables used in the clinical laboratory. Research involves systems dealing with rapid identification and susceptibility testing.

Successful candidate will be responsible for our formulation development group which concentrates on improving and updating existing products, developing component specifications including HPLC assays for antimicrobial and supervising pilot scale-up production.

Background should include a Ph.D. in Biochemistry, Microbiology or related field with 3-5 years experience in a diagnostic industry or academia. Background in formulation development and development of manufacturing processes is essential.

Baxter Healthcare Corporation, MicroScan Division, is a leader in the healthcare industry and we offer excellent salaries and benefits to the individuals who qualify for our positions. If you feel that you have the skills we need, send your resume, stating current salary to: **Vice President of Human Resources, Baxter Healthcare Corporation, MicroScan Division, 1584 Enterprise Boulevard, West Sacramento, California 95691.** We are an equal opportunity employer m/f/h/v.

MicroScan Division

Baxter

POSITIONS OPEN

FACULTY POSITION in the Biology Division of the California Institute of Technology (Caltech).

Caltech seeks a new faculty member in the Biology Division with research interests in biotechnology and its application to current biological problems. Research programs might include the development and application of new theoretical treatments, techniques, or instruments to the study of macromolecules, chromosomes, genomic structure, genetic information, or genome evolution. The appointment may be at the **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** ranks, depending on experience. The appointment will initially be for 4 years and will be either tenure-track or tenured, depending on experience. Send curriculum vitae and names and addresses of three references to: **Barbara Wold, Chair, Biotechnology Search Committee, Biology Division, California Institute of Technology, Pasadena, CA 91125.** Caltech is an Equal Opportunity Employer and welcomes applications from minorities and women.

FACULTY POSITION IN MOLECULAR BIOLOGY. The Department of Biochemistry and Molecular Biology at the University of South Florida (USF) College of Medicine invites applications for a tenure-track position at the level of **ASSISTANT OR ASSOCIATE PROFESSOR** in the area of molecular biology. Candidates should have a Ph.D. in biochemistry, molecular biology, or closely related discipline and a minimum of 2 years of postdoctoral research experience. Applicants should submit before 3 May 1990 curriculum vitae, a description of research plans, and three letters of reference to: **Marvin T. Williams, Ph.D., Department of Biochemistry and Molecular Biology, University of South Florida College of Medicine, MDC Box 7, Tampa, FL 33612.** The University of South Florida is an Affirmative Action/Equal Opportunity Institution.

FACULTY POSITION, OBSTETRICS AND GYNECOLOGY. The Department of Obstetrics and Gynecology, University of Minnesota, seeks a faculty member to teach and conduct research in maternal-fetal medicine. Candidates with demonstrated involvement in quality research accepted or published in peer-reviewed journals, post M.D. experience, and Board-qualified or -certified in maternal-fetal medicine will be considered at the **ASSISTANT PROFESSOR** level in a tenure-track position. Candidates meeting the above requirements, having attained professional accomplishments in research and writing, and demonstrated effectiveness in teaching and academic advisement will be considered at the **ASSOCIATE PROFESSOR** level with tenure. Those candidates having a national reputation in research and a demonstrated effectiveness in teaching and academic advisement will be considered at the **PROFESSOR** level with tenure. Recruiting deadline is 1 May 1990. Contact: **Bruce A. Work, Jr., M.D., Professor and Head, Box 395 UMHC, University of Minnesota, 420 Delaware Street S.E., Minneapolis, MN 55455.** The University of Minnesota is an Equal Opportunity Educator and Employer, and specifically invites and encourages applications from women and minorities.

DEPARTMENT OF ENTOMOLOGY UNIVERSITY OF ARIZONA FACULTY POSITION TOXICOLOGIST

A Ph.D. in entomology, toxicology, or related science is required. The successful candidate will have a proven research record including postdoctoral experience. We are seeking highly qualified applicants in any area of toxicology including molecular biology of resistance, neurotoxicology, resistance management, environmental biology, and effects of chemicals on biodiversity. The incumbent will be expected to develop a graduate course in toxicology and an additional course in a specialty area of interest. The incumbent will have the opportunity to interact with colleagues in the Center for Toxicology, a university-wide interdisciplinary program and with nearly 50 insect research laboratories associated with the Center for Insect Science. **ASSISTANT PROFESSOR** level is sought but exceptional applicants at a higher level will be considered. Deadline is 15 April 1990 or until filled. Submit curriculum vitae and statement of research interests, publications, and address and telephone or FAX of five references to: **Dr. E. A. Bernays, University of Arizona, Department of Entomology, Tucson, AZ 85721.** Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.

POSITIONS OPEN

FACULTY POSITION, ENVIRONMENTAL BIOCHEMIST/MICROBIOLOGIST

Department of Soil and Water Science, University of Arizona. Tenure-track appointment, **ASSISTANT PROFESSOR**, available 1 September 1990. Ph.D. in soil science, biochemistry, microbiology, or related field required. Research and teaching in sub-surface biochemistry, microbiology with emphasis on biodegradation and bioremediation of organics, and transformation of inorganics. Postdoctoral experience preferred. Closing date: 15 May 1990 or until a suitable candidate is found. Letters of application, transcripts, résumé, and four letters of recommendation should be sent to: **I. L. Pepper, Chairman Search Committee, Department of Soil and Water Science, 429 Shantz Building, University of Arizona, Tucson, AZ 85721.**

An Affirmative Action/Equal Opportunity Employer.

GENETICIST

Wabash College, a private liberal arts college for men, invites applications for a one-semester position in genetics. Teaching responsibilities include team-teaching a sophomore genetics course and a seminar course in an area of the candidate's choice. Applicants who have completed the Ph.D. or Ph.D. candidates will be considered. Salary is competitive. Applicants should submit a résumé and three letters of recommendation to: **David T. Krohne, Department of Biology, Wabash College, Crawfordsville, IN 47933** by 23 March 1990. Women and minorities are especially encouraged to apply. Wabash College is an Equal Opportunity Employer.

Ottawa Regional Cancer Centre (ORCC) and General Hospital (OGH) are seeking a **MEDICAL PHYSICIST** to work in a Nuclear Magnetic Resonance (NMR) imaging and spectroscopy facility. This position supports the human MRI/MRS program. Equipment available: 1.5-Tesla whole body MRI/MRS system with Dec computer systems. Research collaborations are ongoing with the NRC NMR research group which has a wide range of experimental animal MRI/MRS systems. The Medical Physics Department of the ORCC and OGH has eight medical physicists, excellent opportunities for research, and academic activities. Appointments at each of the two universities are possible. Competitive salary is available and experience in human MRI/MRS is an asset. Send application to:

**Dr. G. P. Raaphorst
Head, Medical Physics Department
Ottawa Regional Cancer Centre
190 Melrose Avenue
Ottawa, Ontario, Canada K1Y 4K7**

MOLECULAR BIOLOGIST GYNECOLOGIC ONCOLOGY/CMS BIOLOGY NORTHWESTERN UNIVERSITY MEDICAL SCHOOL

Applications are invited for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level with primary appointment in the Section of Gynecologic Oncology within the Department of Obstetrics and Gynecology (OB/GYN) and secondary appointment in the Department of Cell, Molecular, and Structural (CMS) Biology at the Northwestern University Medical School. Applicants should have a Ph.D. degree and postdoctoral training in molecular biology relating to the study of malignant diseases. We are seeking an individual who will develop an independent, basic molecular biology research program in gynecologic oncology, collaborate with other members of the departments of OB/GYN and CMS Biology and the cancer center on projects investigating human malignancy, and participate in medical student and graduate teaching programs of both departments.

Applicants should send curriculum vitae, a brief description of previous and future research and teaching interests, reprints of significant published work or preprints of manuscripts in press, and at least three letters of recommendation to: **John R. Lurain, M.D., Head, Section of Gynecologic Oncology, Department of Obstetrics and Gynecology, Northwestern University Medical School, 333 East Superior Street, Chicago, IL 60611.**

Northwestern University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

POSITIONS OPEN

IMMUNOLOGY. Lehigh University invites applications for a tenure-track faculty position in immunology, to complement our strengths in molecular/cell biology. Rank open. The successful candidate will maintain an extramurally funded research program, guide Ph.D. students, and participate in undergraduate teaching. Our programs are supported by a predoctoral training grant from NIH and an undergraduate education grant from the Howard Hughes Medical Institute. Starting date flexible. Send statement of research interests, curriculum vitae, and have three letters of reference sent to: Dr. Steven Krawiec, Search Committee, Department of Biology 31, Lehigh University, Bethlehem, PA 18015. An Affirmative Action/Equal Opportunity Employer.

MOLECULAR AND DEVELOPMENTAL NEUROBIOLOGY CENTER FOR MOLECULAR MEDICINE YALE UNIVERSITY SCHOOL OF MEDICINE

The Yale University School of Medicine is seeking applicants at the level of **ASSISTANT, ASSOCIATE, AND FULL PROFESSORS** for the Molecular and Developmental Neurobiology Program in the newly created Yale Center for Molecular Medicine. Research in the program will focus on various aspects of neurobiology, with potential application to human disease. Any area of neurobiology at the molecular or genetic levels will be considered. Researchers working with either vertebrate or invertebrate model systems are encouraged to apply. M.D. or Ph.D. appointees will hold regular faculty positions in one of the existing departments of the School of Medicine.

Salary and partial research support will be provided. Curriculum vitae should be submitted by 30 April 1990 to:

Dr. Spyros Artavanis-Tsakonas, Chair
Search Committee for the
Yale Center for Molecular Medicine
Yale University School of Medicine
Box 3333
New Haven, CT 06510

Yale University is an Equal Opportunity/Affirmative Action Employer.

MARINE BOTANY SCRIPPS INSTITUTION OF OCEANOGRAPHY

Applications are invited for an **ASSISTANT PROFESSOR (TENURE-TRACK), ASSOCIATE OR FULL PROFESSOR (TENURED)** position in marine botany. The level of appointment and salary (University of California salary scale) will be commensurate with the successful candidate's qualifications and experience. At the time of the appointment, the successful candidate must hold a Ph.D. degree in a biological science, and must have demonstrated excellence in independent research. Associate or full level candidates must show evidence of a strong research record; assistant level candidates will be expected to show evidence of their potential through publication records appropriate for their level of experience and highly positive letters of recommendation.

The primary qualification for this position is a research specialization which focuses on marine algae or marine vascular plants. Candidates working at all levels of biological organization will be considered for this position. Candidates are expected to conduct an active research program supported by extramural grants, and to be involved in the teaching and supervision of graduate students. Teaching requirements include presenting a comprehensive course in marine botany.

Candidates should include with their letter of application a brief synopsis of their research interests, a summary of teaching experience, a list of publications, and the names of four to six references. Please send applications to:

Chairman, Marine Botany Search
SIO Graduate Department, A-008
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, CA 92093

Applications must be received by 1 July 1990 to be ensured of consideration.

An Equal Opportunity/Affirmative Action Employer.

**There Is
A Company
That
Believes...**

*Success
is the
stepping-stone
for further
progress.*

At Glaxo Inc. in Research Triangle Park, N.C. our unparalleled growth in the U.S. prescription pharmaceutical sector has served to rigorously intensify our research and development activities. Underway is a 10-building Research and Development complex that will rival any in the industry. With completion targeted for 1991, this 1.5 million square-foot research center will house our many promising development programs for established products, current basic research programs and significant additional programs for the exploration and discovery of new therapeutic agents.

At the threshold of an era of new dimensions in pharmaceutical research, we invite you to share the challenge of the tasks and sense of fulfillment that lies ahead. Join our Research and Development Team in one of these exciting positions:

RESEARCH INVESTIGATOR Cellular and Molecular Pharmacology

This Ph.D. Senior Scientist position will participate in a multidisciplinary research program focused on cardiovascular therapy. Additionally, candidate will provide creative and innovative research expertise in receptor biology.

Background must include a Ph.D. in Biochemistry, Cell Biology or Pharmacology with 2+ years of relevant postdoctoral experience. Previous training and experience in the fields of biochemical, pharmacological and/or molecular characterization of cardiac/muscle receptors is desired.

Respond to Job #9110B006 on all resumes.

ELECTROPHYSIOLOGIST

This key position, within our Pharmacology Department, will conduct and direct independent studies on complex cardiovascular questions.

Background should include a Ph.D. and at least one year of postdoctoral experience. Previous electrophysiological experience with vascular or cardiac tissues is required. Direct experience in patch clamping, artificial bilayers, fluorescent dye measurements or in vitro channel expression is desirable.

Respond to Job #9110B003 on all resumes.

POSTDOCTORAL FELLOW Pharmacology

To study transduction mechanisms including G-protein, phospholipase C interactions. Expertise in cell biology and biochemistry required.

Respond to Job #PD-CF on all resumes.

Research Triangle Park, North Carolina offers opportunities for people who seek a well-rounded, comfortable lifestyle. This world-famous scientific/industrial/academic community near Raleigh, Durham and Chapel Hill affords access to respected universities, beautiful, reasonably priced residential areas, major retail centers, excellent health care and abundant cultural and recreational facilities. And people like you.

Join us and enjoy excellent pay, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Send your resume, INDICATING THE CORRESPONDING JOB # and salary history to: **Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, N.C. 27709.** (No phone calls or agency referrals, please). An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

Our belief begins with you.

POSITIONS OPEN

MOLECULAR ENDOCRINOLOGY POSTDOCTORAL AND JUNIOR FACULTY POSITIONS. The Division of Endocrinology, Department of Medicine, of the University of Miami School of Medicine is seeking candidates formally trained in molecular biology and interested in working on molecular biology of bone cells or gene expression of peptide hormones and growth factors involved in mineral metabolism. **Telephone: 305-547-6593** for information. Curriculum vitae and names of two references should be sent to: **Dr. Guy A. Howard or Dr. Bernard A. Roos, Division of Endocrinology/Department of Medicine, University of Miami School of Medicine, P.O. Box 016960 (D-503), Miami, FL 33101.** An Equal Opportunity/Affirmative Action Employer.



UNIVERSITY OF MANITOBA DEPARTMENT OF PHYSIOLOGY MOLECULAR BIOLOGY IN CARDIOVASCULAR SCIENCES

The Department of Physiology, Faculty of Medicine, University of Manitoba invites applications for a contingent faculty position at the level of **ASSISTANT PROFESSOR** in the Division of Cardiovascular Sciences. Applicants should have M.D. or Ph.D. degree in any of the medical sciences with 2 to 3 years of postdoctoral experience in molecular biology. Candidates are expected to establish independent research programs in the area of cardiovascular molecular biology and teach both medical and graduate students. Salary will be commensurate with qualifications and experience. Both women and men are encouraged to apply. *In accordance with Canadian Immigration, priority will be given to Canadian citizens and permanent residents.* Please send your résumé, statement of research goals, and names of three referees by 15 May 1990 to: **Dr. N. S. Dhalla, Division of Cardiovascular Sciences, St. Boniface Hospital Research Centre, 351 Tache Avenue, Winnipeg, Manitoba, Canada R2H 2A6.**

UNIVERSITY OF NEBRASKA-LINCOLN DEPARTMENT OF VETERINARY SCIENCE CELLULAR/MOLECULAR IMMUNOLOGIST

Twelve-month, tenure-track position. Seek scientist to apply cellular immunology/molecular immunology techniques to the study of the immune systems of food producing animals with the objective of controlling infectious diseases involving respiratory, enteric, or reproductive systems. Will be expected to develop a competitive research program and participate in teaching/training graduate students. Start-up funds, technical support, and excellent laboratory and animal isolation facilities (BL2 and BL3) available. Requires Ph.D. in an appropriate discipline. Rank and salary commensurate with record of accomplishments.

TRANSGENIC ANIMAL SYSTEMS SCIENTIST

Tenure-track, academic year faculty appointment, with guaranteed summer salary first 3 years in the Center for Biotechnology available at **ASSISTANT/ASSOCIATE PROFESSOR** level. Full professor will be considered in exceptional cases. Must develop a strong research program involving transgenic mice or other animal species. Areas of interest include, but are not limited to, cellular differentiation, characterization of the immune system, manipulation of viral and cellular transgenes having oncogenic or infectious disease applications, and regulation of transgene expression. Will be expected to cooperate with virologists, immunologists, bacteriologists, pathologists, and molecular biologists in the application of transgenic technology to animal disease research, and will participate in training graduate students. Position includes generous start-up funds, technical support, excellent laboratory space, and animal isolation facilities (BL2 and BL3). Requires Ph.D. in an appropriate discipline, postdoctoral experience, and expertise in the areas of transgenic animal systems and molecular biology.

To apply for either position, send curriculum vitae, three letters of reference, and a synopsis of proposed research and career interests postmarked by 20 April 1990 to:

**Dr. John A. Schmitz, Head
Department of Veterinary Science
University of Nebraska-Lincoln
Lincoln, NE 68583-0905
Telephone: 402-472-2952 or FAX: 402-472-3094
Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

MOLECULAR FOREST GENETICIST/BIOLOGIST. ASSOCIATE/FULL PROFESSOR of molecular genetics/biology, tenure track. Candidates are expected to establish a research program to supplement multidisciplinary team focused on using molecular tools for improvement of southern pine. The program is expected to use recombinant DNA and gene transfer technology to elucidate and manipulate genes of economic importance. Financial/staff support associated with position. New plant molecular biology facility available 1993. Ph.D. in biochemistry, forestry, genetics, or related field required. Significant research accomplishments and ability to use innovative approaches and techniques in research, secure extramural funding, and work with a team are essential. Salary commensurate with experience. Submit application letter, including statement of current research direction, résumé, and three professional references to: **Dr. Ronald J. Newton, Chair Search Committee, Department of Forest Service, Texas A&M University, College Station, TX, 77843-2135.**

NEUROPHYSIOLOGIST/ NEUROPHARMACOLOGIST

Electrophysiologist to study cellular basis of neurotransmitter interactions related to brainstem control of cerebral cortical function in multidisciplinary neuroscience laboratory. **POSTDOCTORAL/INSTRUCTOR.** Please send curriculum vitae and bibliography to: **K. Koenig or D. J. Reis, Division of Neurobiology, Cornell University Medical College, 411 East 69th Street—KB410, New York, NY 10021.** Affirmative Action/Equal Opportunity Employer, M/F/H/V.

NEUROPATHOLOGIST. Department of Pathology, Oregon Health Sciences University (OHSU), invites applications for Board-certified or equivalent, academically dedicated neuropathologist. Duties include teaching of medical and graduate students, diagnostic neuropathology, and productive research, e.g., investigations of Alzheimer's and related neurodegenerative disorders, neurooncology, pediatric neuropathology, or related fields. Interested applicants should submit current curriculum vitae and names of three referees to: **Dr. M. J. Ball, Neuropathology, Oregon Health Sciences University, L 113, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098.** OHSU is an Affirmative Action/Equal Opportunity Employer.

PLANT MOLECULAR GENETICIST. Research/teaching position at rank of **ASSISTANT PROFESSOR.** Preference for postdoctoral experience in crop improvement. Strong background in plant genetics and strong independent research program required. Collaboration with plant breeders and/or physiologists working on agronomic and horticultural crops will be expected. Send applications including curriculum vitae, transcripts, summary of formal training and experience in genetics, reprints of publications, current research interests, and three confidential letters of recommendation to: **Professor W. F. Grant, P.O. Box 4000, Department of Plant Science, Macdonald College of McGill University, Ste. Anne de Bellevue, Quebec, H9X 1C0 Canada, no later than 1 April 1990.**

NEUROSCIENTIST

The DHHS, PHS, Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), Rockville, Maryland, seeks a **PROJECT OFFICER** to develop, stimulate, and monitor a program that addresses the effects of alcohol on the brain. The program takes a multidisciplinary perspective, including neurochemistry, physiology, anatomy, pharmacogenetics, and cell culture.

The ideal candidates should have a Ph.D. or equivalent in an area related to the neurosciences, such as pharmacology, biochemistry, physiology, or anatomy. Postdoctoral experience in independent research, especially if related to alcohol research, is desirable.

This position will be filled as a competitive civil service appointment at the GS-13 to -14 level with salary commensurate with experience, education, and current salary level. Range: \$42,601 to \$65,444. Application deadline: 1 May 1990. *U.S. citizenship is required.* Candidates should mail an Application for Federal Employment (SF-171) to: **Frank Shevock, NIAAA Personnel Team, ADAMHA, 5600 Fishers Lane, Room 15C-12, Rockville, MD 20857.** Telephone: 301-443-5437.

ADAMHA is an Equal Opportunity Employer.

POSITIONS OPEN

NEUROIMAGING

Neuroscientist/Computer Scientist with experience in image analysis to join/manage computer core for large multidisciplinary neuroscience laboratory. Individual research encouraged. **POSTDOCTORAL TO ASSISTANT PROFESSOR** level. Please send curriculum vitae and bibliography to: **S. Bergen or D. J. Reis, Division of Neurobiology, Cornell University Medical College, 411 East 69th Street—KB410, New York, NY 10021.** Affirmative Action/Equal Opportunity Employer, M/F/H/V.

PLANT BIOTECHNOLOGY

A leading vegetable seed company has openings for a **SCIENTIST** (postdoctoral level) and **RESEARCH ASSISTANTS** (M.S./B.S. level). Experience in plant tissue culture and gene transfer required. Competitive salary and benefit package. Send résumé, three references, and transcripts to: **Route 4, Box 1255, Woodland, CA 95695, Attention: Brett Sanders, Job #101.** Equal Opportunity Employer.

COMPARATIVE PHYSIOLOGIST

Bradley University, Department of Biology, invites applications for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. The starting date is 20 August 1990. Responsibilities include teaching comparative physiology, pathophysiology, and graduate human physiology and participating in introductory courses. Teaching load typically includes three courses per semester and a research program involving undergraduate and master's students. A Ph.D. is required and postdoctoral experience is desired. Screening of applicants will begin 9 April 1990 and will continue until the position is filled. Send letter of application, résumé, transcripts, and three letters of recommendation to: **Dr. John A. DePinto, Chairperson, Department of Biology, Bradley University, Peoria, IL 61625.** Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.

PROKARYOTIC GENETICS

The Department of Biology at Texas A&M University invites applications for a tenure-track position in bacterial or bacteriophage genetics and molecular biology. Candidates should be using a prokaryotic organism to study fundamental biological problems. Special consideration will be given to applicants interested in developmental, regulatory, or membrane systems. Essential qualifications include a strong record of research accomplishment, the ability to develop a vigorous research program, and a commitment to training undergraduate and graduate students. Please send curriculum vitae, a statement of research interests, and three letters of recommendation by 15 April 1990 to: **Dr. Michael D. Manson, Chairman, Microbiology Search, Department of Biology, Texas A&M University, College Station, TX 77843.** Telephone: 1-800-TAM-BIOL. FAX: 409-845-2891. An Affirmative Action/Equal Opportunity Employer.

MOLECULAR PARASITOLOGY. POSTDOCTORAL POSITION available for research on regulation of muscle gene expression in trichinosis. Research is on mechanisms that control altered muscle gene expression in infected muscle cells and identification of parasite factors that may be involved. Applicants with interests in host/parasite interactions and experience in molecular biology are preferred. Send résumé and names of three references to: **Douglas P. Jasmer, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA 99164-7040.** Grantor (NIH) restricts employees to citizens, noncitizen nationals, or permanent residents at time of appointment. Washington State University is an Equal Opportunity/Affirmative Action Employer. Protected group members are encouraged to apply.

Center for Coastal Studies, Scripps Institution of Oceanography (SIO), has ONR funding for a 3 year **POSTDOCTORAL POSITION** in nearshore processes with emphasis on sediment dynamics. Ph.D. in a physical science is required; however, direct experience in the field is not necessary. *U.S. citizenship required.* Salary: \$33,000 per year. Send curriculum vitae and names of three references to: **Dr. J. A. Nichols, SIO Mail Code A-009, La Jolla, CA 92093.** Closing date: 1 May 1990. Affirmative Action/Equal Opportunity Employer.

XOMA is expanding its research interests into targeted therapeutics in infectious disease & autoimmunity & has immediate openings for several scientists. Candidates must have a demonstrated ability to work independently & possess excellent interpersonal & communication skills.

Group Leader- Infectious Disease (Sepsis)

The successful candidate will be responsible for developing second generation therapeutics for treatment of septic shock. In addition, this individual will be responsible for all aspects of current Sepsis-related projects, providing sufficient data on their mechanism of action and applicability. The Group Leader will work closely with other departments in evaluating *in vitro* and *in vivo* the efficacy of new compounds. He/she will supervise the research activities of several staff scientists, and interact closely with other members of the Immunology department.

Candidates must have a M.D. or a Ph.D. in Immunology, Microbiology or a related field with a record of independent research and publications in the infectious diseases discipline. He/She must have 3-5 years product-oriented research exp. in areas related to infectious disease. Ideally, the candidate will be a proven manager with industrial exp.

Scientist-Autoimmunity

Candidates with a M.D./Ph.D. and 2-3 years postdoctoral training in autoimmunity or closely-related field should apply. Candidates will be expected to develop research projects in the area of human lymphoid cell activation and/or differentiation antigens as possible targets for immunotherapy. Knowledge of techniques used in molecular immunology is preferred. The successful candidate will participate in the evaluation of the therapeutic value of new methodologies through *in vitro* studies.

XOMA offers competitive salary and comprehensive benefits in an outstanding work environment. For consideration, please forward your C.V., salary history, and the names of three references to: Technical Recruiting Coordinator, XOMA Corporation, 2910 Seventh Street, Berkeley, CA 94710. EOE.



TECHNOLOGY DEVELOPMENT/TRANSFER

NATIONAL CENTER FOR HUMAN GENOME RESEARCH NATIONAL INSTITUTES OF HEALTH (NIH)

The National Center for Human Genome Research, NIH, Bethesda, MD seeks an outstanding candidate to develop and implement a program to facilitate technology development and transfer related to the Human Genome Program. The successful candidate will have a Ph.D. or M.D., at least three years of postdoctoral training, and significant scientific experience beyond the postdoctoral level. Applicants should also have a thorough knowledge of technology currently being used and developed in the NIH program to map and sequence the human genome as well as a working knowledge of the biotechnology industry. The duties of the position will include assessment of the state of technology development for genome studies, interaction with biotechnology and instrumentation firms to ensure the rapid transfer of technology from federally supported research to industry, management of Small Business and other NIH grants, and advising the Center Director as to the needs for technology development for the genome program. The salary range is \$42,600 to \$65,400, or may be negotiable commensurate with qualifications and experience. Interested candidates should submit curriculum vitae and names of three references to:

Ms. Karen Thomas
National Institutes of Health
Building 31, Room 1C27
9000 Rockville Pike
Bethesda, MD 20892
(301) 496-2400



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

Research Associates

The Squibb Institute for Medical Research is continuing to expand our extensive research efforts in the areas of cardiovascular, infectious and metabolic diseases. This has created exceptional opportunities for creative scientific research professionals in the following departments:

VIROLOGY

- Contribute to the developing antiviral program by analyzing synthetic antiviral compounds as substrates for viral and cellular enzymes utilizing HPLC and enzyme purification methods as well as developing new analytical techniques for the program.

DRUG METABOLISM

- Development of assays for and determination of Drug/Metabolite concentrations in biological samples utilizing HPLC, GLC, and LSC, NMR, MS, and radioenzymatic receptor assays.

BACTERIAL GENETICS

- Assist in conducting studies involved in heterologous expression of a variety of genes in bacterial, yeast and mammalian systems.

PHARMACOLOGY

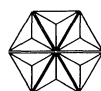
Contribute to developing research programs in the following areas:

- Cardiovascular, renal and endocrine actions of new agents in the renin-angiotensin system and atrial natriuretic peptides utilizing small and large animal models and *in vivo* measurements of cardiac, vascular and renal function.
- Atherosclerosis research in various animal models utilizing techniques in surgery, and dissection and preparation of tissue for morphometric analysis.
- Assist in the development of novel drug screens for natural products active at receptors for cardiovascular applications utilizing radioligand binding, ELISA and screen automation methods.

Candidates for these positions should possess a BS/MS in a relevant scientific discipline and a minimum 1 - 2 years experience.

Please forward your resume to: **The Squibb Institute for Medical Research, Human Resources Dept., 104, P.O. Box 4000, Princeton, NJ 08543.**
An Equal Opportunity Employer.

The Squibb Institute for Medical Research



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POSITIONS OPEN

Two **POSTDOCTORAL OPENINGS** available, one immediately, the other September 1990, for Monte Carlo and molecular dynamics studies of fluids in micropores. Background in computational physics or chemistry required; experience with supercomputing desirable. Initial appointment for 1 year at \$22,000; possibility of renewal for up to 2 years. Send curriculum vitae and names of two or three references to: **D. J. Diestler, Department of Chemistry, Purdue University, West Lafayette, IN 47907.** *Purdue is an Equal Opportunity/Affirmative Action University.*

POSTDOCTORAL POSITION. For recent Ph.D. to study the molecular characterization and regulation of prohormone processing enzymes in the biosynthesis of enkephalin and tachykinin peptide neurotransmitters. This project involves in vitro expression of prohormone cDNA's, enzyme purification, microsequencing of proteolytic products, and production of enzyme cDNA and antibody probes. Experience in protein/peptide chemistry and/or molecular biology is required. Send curriculum vitae and names of three references to: **Dr. Vivian Hook, Department of Biochemistry, Uniformed Services University of the Health Sciences, Bethesda, MD 20814.**

POSTDOCTORAL POSITION IN CELLULAR ENDOCRINOLOGY

POSTDOCTORAL POSITION available immediately to study the mechanistic basis of heterogenous protein hormone secretion by individual endocrine cells in culture. The project involves a novel assay procedure (reverse hemolytic plaque assay) in combination with molecular approaches. Experience in endocrinology or molecular biology preferred. Send curriculum vitae and three references to: **Dr. Michael J. Taylor, Department of Veterinary Physiology and Pharmacology, College of Veterinary Medicine, Iowa State University, Ames, IA 50011.**

A **POSTDOCTORAL POSITION** is available on a joint Forest Service-Ecosystems Center project in Woods Hole, Massachusetts. The project, "Intermodel Comparisons of Ecological Response to Climate Change," will compare two global ecosystems models under altered climate, with and without human disturbance. We seek a candidate with a strong background in ecosystems ecology and some modeling experience for a 1-year appointment at the GS-11 grade, salary: \$29,891. Individuals should send a résumé, Form SF-171 Application for Federal Employment, and college transcripts to: **Dr. Linda Joyce, Rocky Mountain Forest and Range Experiment Station, 3825 East Mulberry, Fort Collins, CO 80524.**

U.S. Department of Agriculture, Agricultural Research Service (USDA/ARS). **POSTDOCTORAL RESEARCH ASSOCIATE (MOLECULAR BIOLOGIST)**, GS-11/12, \$29,891 to \$35,825 available immediately with the Veterinary Toxicology and Entomology Research Laboratory (VTERL), College Station, Texas. The incumbent will construct gene probes for peptides that are biologically active in insects and use these probes for analysis of the distribution of mRNA for the peptides in livestock insects. Ph.D. obtained in the last 3 years is desired. Contact: **Dr. Andrew Chen, USDA/ARS, VTERL, Route 5, Box 810, College Station, TX 77840** or telephone: 409-260-9400. Applications in response to this advertisement should be marked S-0-003. *USDA is an Equal Opportunity Employer.*

POSTDOCTORALS IN COMPLEX GENOMES

The Department of Genetics at Washington University offers unique opportunities for training and research in the analysis of complex genomes. Targets for analysis include the genomes of humans, the mouse, *Drosophila*, the nematode, yeast, and bacteria. Analytical methods include genetic mapping with restriction fragment length polymorphisms, physical mapping with cosmids and yeast artificial chromosomes, long-range restriction mapping, large-scale DNA sequencing, and database management. Principal investigators include Maynard Olson, Helen Donis-Keller, Robert Waterston, David Schlessinger, Philip Green, and Daniel Hartl. Send résumé to: **Daniel L. Hartl, Box 8232, Department of Genetics, Washington University School of Medicine, 4566 Scott Avenue, St. Louis, MO 63110-1095.** *Equal Opportunity/Affirmative Action Employer, M/F/H/V.*

POSITIONS OPEN

POSTDOCTORAL POSITION. In neurobiology/neurochemistry to localize and characterize a newly identified molecular target related to sleep and anesthesia. Available 1 June 1990. Send résumé and names of three references to:

**Dr. Neil R. Krieger
Department of Anesthesia
Harvard Medical School
Brigham & Women's Hospital
Boston, MA 02115**

POSTDOCTORAL POSITIONS

Two postdoctoral positions are available in the areas of molecular immunology and macrophage biology. Research is directed at the identification and characterization of transcriptional regulatory proteins controlling human monocyte interleukin 1 expression (Matthew Fenton, Ph.D.), and the study of novel regulatory pathways controlling cytokine expression in macrophages from normal and autoimmune-prone mice (David Beller, Ph.D.). Send curriculum vitae and three letters of reference to: **Drs. M. Fenton or D. Beller, Laboratory of Immunology, Boston University Medical Center, 88 East Newton Street, Boston, MA 02118.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN STREAM ECOLOGY. Postdoctoral position is available 1 June 1990 in interdisciplinary research on influence of landforms and riparian forests on stream ecosystems. Successful candidate will have a Ph.D. in biological science with research experience in stream nutrient dynamics, fish habitat ecology, and model development and programming. Ability to work effectively on an interdisciplinary research team is essential. Salary: \$25,000 per year (12 months). Please send letter of interest, curriculum vitae, and names of three references by 1 May 1990 to: **Dr. Stan Gregory, Department of Fisheries and Wildlife, Oregon State University (OSU), Corvallis, OR 97331.** *OSU is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Available immediately in cell and reproductive biology for studies involving aspects of the differentiation of the mammalian ovarian follicles (oocyte, granulosa cells, etc.). Experience in biochemistry desired. Send curriculum vitae and three names of references to: **Dr. Everett Anderson, Department of Anatomy and Cellular Biology and Laboratory of Human Reproduction and Reproductive Biology, Harvard Medical School, 45 Shattuck Street, Boston, MA 02115.** *Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE. The Department of Surgery at the Shriners Burns Institute, Massachusetts General Hospital, and the Harvard Medical School, Boston, Massachusetts, is seeking applicants for a research associate with expertise in the area of metabolic and nutritional needs of infants. Qualifications for the position include a Ph.D. in endocrinology, biochemistry, or physiology. Preference will be given to applicants with several years of postdoctoral experience in GC/MS using stable isotopes. The successful applicant will apply stable isotope ratio mass spectrometric methods to the study of metabolism in infants and develop a research program using combustion isotope ratio mass spectrometry. Send curriculum vitae and references to: **Vernon R. Young, Ph.D., D.Sc., Director of Research, Shriners Burns Institute, 51 Blossom Street, Boston, MA 02114.** *Women and minorities are encouraged to apply.*

RESEARCH AND DEVELOPMENT IN VITRO DIAGNOSTICS

Experienced R&D scientists are needed to develop new products for a novel immunochemical reagent system. Candidates should have industrial experience in the successful development of immunological or DNA probe in vitro diagnostic products. A Ph.D. or equivalent in biochemistry or immunology is desirable. Immunodiagnosics, Inc., is an emerging biotechnology company which offers an outstanding entrepreneurial opportunity. Interested candidates please send résumés to:

**Personnel Manager
Immunodiagnosics, Inc.
3865 North Business Center Drive
Tucson, AZ 85705**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

A postdoctoral position is available to study the structure and function of phosphatidylinositol (PI)-anchored membrane proteins. Areas of investigation include the nature of the signal for PI-anchor attachment, and the role of this class of membrane proteins in lymphocyte activation. Background in molecular or cell biology or immunology is desirable. Send curriculum vitae and names and addresses of three references to: **Dr. Douglas M. Lublin, Department of Pathology, Washington University School of Medicine, 660 South Euclid Avenue, Box 8118, St. Louis, MO 63110.** *An Equal Opportunity Employer.*

POSTDOCTORAL/RESEARCH ASSOCIATE

A postdoctoral/research associate position is available immediately to study herpesvirus and/or HIV at the molecular level (i) receptor-ligand interaction in gene activation, (ii) purification of soluble mediators and cellular transcriptional factors, and (iii) cDNA cloning. Requires Ph.D. degree. Must have a strong background in protein chemistry, HPLC, and molecular biology. Applicant should send curriculum vitae, statement of research interest and objectives, and names and addresses of three references to: **Dr. Meihan Nonoyama, Tampa Bay Research Institute, 10900 Roosevelt Boulevard, St. Petersburg, FL 33716.**

BIOTECHNOLOGY/AQUACULTURE RESEARCH ASSOCIATE

Three-year renewable position for Ph.D. in biological sciences (biotechnology/genetics) with evidence of grant/publication productivity. Collaborate with established program in aquatic ecology/aquaculture and develop a funded, innovative/entrepreneurial research program using molecular and quantitative genetic methodologies to enhance the culture potential of aquatic organisms. Chance to direct M.S./Ph.D. research and teach specialty course. Send application, research interests/skills, curriculum vitae, graduate transcripts, reprints, and names of three references to: **Faculty Staff Relations, State University of New York College, Brockport, NY 14420.** Review begins 16 April 1990 and continues until position is filled.

POSTDOCTORAL RESEARCH ASSOCIATE CLINICAL INSTRUCTOR. Require Ph.D. with demonstrable research experience in cytogenetics, molecular genetics, and/or epidemiology, to participate in molecular/cytogenetic studies of oocyte organization and events of fertilization and embryogenesis, and in supervised teaching of genetics to medical students. RNA molecular biology and some practical experience with statistics and computers highly preferred. Reply with curriculum vitae, letter of introduction, and names and telephone numbers of at least three references to: **Charles E. Boklage, Ph.D., Director, Genetics Program, East Carolina University School of Medicine, 2N-78 Brody Building, Greenville, NC 27858-4354.** *East Carolina University is an Affirmative Action/Equal Opportunity Employer and encourages applications from qualified women and minorities. Federal law requires proper documentation of identity and employability at the time of employment. It is requested this documentation be included with your application.*

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE (USDA/ARS)

RESEARCH CHEMIST/BIOCHEMIST. Microbial Properties Research Unit, Peoria, Illinois. ARS is seeking qualified candidates for temporary appointment (2 years +) as a research associate. Research objectives include: identification of microbial site-specific hydroxylations of aromatic rings; reaction characterization; elucidation of limiting enzymatic steps key to the process of interest; and purification/characterization of enzymes of potential commercial interest. Biochemistry/natural products chemistry background preferred, microbiological experience desirable. A Ph.D. within past 3 years is required. Salary is commensurate with experience; starting salary for GS-11 (\$29,891); GS-12 (\$35,825). Eligible for benefits. Send curriculum vitae with telephone numbers of three references to: **Dr. Paul L. Bolen, USDA-ARS, NRRC, 1815 North University Street, Peoria, IL 61604.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RESEARCH ASSISTANT. Dalton Research Center, University of Missouri-Columbia is recruiting for a research assistant to manage a multiuser chromatography laboratory. Will include maintenance of multiple HPLC systems and development of HPLC methods for analytical and preparative applications; will train staff in theory and use of HPLC. Must have minimum of B.S. degree in chemistry or biology and expertise with biological and chemical laboratory equipment and procedures. Knowledge of principles and practice of analytical biochemistry and quantitative analytical chemistry is essential. Send résumé and three references to: **Dr. Michael Rovetto, NE407 Physiology, Medical Science Building, Columbia, MO 65211.** *The University of Missouri is an Equal Opportunity and Affirmative Action Employer.*

RESEARCH ASSOCIATE for west central Ohio education and research facility to conduct research in analytical chemistry. Development of new chromatography columns and detectors (electrochemical). No experience required in above duties but applicants will qualify with a Ph.D. in analytical chemistry, all but dissertation acceptable, in addition to an M.S. in analytical chemistry and at least one publication in the field of electrochemistry, and 1 year of experience in research in the area of electrochemistry. Must have taken as part of Ph.D. (ABD) program at least three credit hours in each of electroanalytical chemistry, interpretation of spectra, chemical separations, and analytical spectroscopy. Forty hours per week, 8 a.m. to 5 p.m., \$2030 per month. *Must have proof of legal authority to work permanently in the United States.* Qualified applicants send résumé in duplicate (no calls) to: **C. Bussard, JO#1131661, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

UNIVERSITY OF TORONTO CENTRE FOR RESEARCH IN NEURODEGENERATIVE DISEASES

Applications are invited for a position in **RESEARCH** into the etiology and mechanisms of amyotrophic lateral sclerosis (motor neuron) disease. Applicants must have a Ph.D. or M.D. and have a strong background in molecular biology, molecular genetics, and gene regulation. Start-up funds will be provided. Successful candidates must initiate independent and original research programs.

The centre is located in the core of the university/hospital complex in close proximity to more than 150 neuroscientists.

Send curriculum vitae and names of references to: **Dr. D. R. McLachlan, Centre for Research in Neurodegenerative Diseases, University of Toronto, Room, 3318, Medical Sciences Building, 1 King's College Circle, Toronto, Canada M5S 1A8.** Application deadline: 30 April 1990.

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

RESEARCH/CERAMIC ENGINEER. Participate in the research and design, of new and existing ceramic products for manufacturer of specialty refractories catering to the iron, steel, and nonferrous metal industries. Formulate a bulk composition with thermochemical and mechanical properties for high-temperature ceramics. Form shapes and utilize high-temperature treatments to obtain ceramic bonding. Conduct physical property tests including compressive and transverse stress tests, creep resistance tests, and other thermal analytical methods. Characterize composition and microstructure by using x-ray diffraction, optical and scanning electron microscopy. Minimum requirements: M.S. degree in ceramic or materials engineering and completed one course in each of the following: (i) scanning electron microscopy, (ii) advanced thermal chemical equilibrium, (iii) crystal structure analysis, (iv) interpretation of solid-state metallurgy, and (v) rock forming and silicate minerals. Must also have completed one major project in thermal expansion. Must have 1 year of experience in position offered or as a graduate research assistant. Experience as a graduate research assistant must include a research project on thermal shock resistance. Forty hours per week, 8:00 a.m. to 5:00 p.m., \$34,000 per year. Submit résumé to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605.** Attention: **L. Donegan, Reference #1087-D.** *An employer-paid ad.*



Molecular Biology Research

CIBA-GEIGY's Pharmaceuticals Division is consistently at the forefront of scientific research. The recent expansion of our efforts in molecular biology within the drug discovery process has created exciting opportunities for Senior and Associate Scientists.

Senior Scientist

Will be responsible for the innovative use of molecular biology in drug discovery programs in inflammation and cardiovascular diseases. Preferred areas of interest include:

- Molecular biology of receptors or adhesion molecules
- Regulation of eukaryotic gene expression

Candidate should have a PhD in Molecular Biology, Biochemistry or related areas. Postdoctoral experience is required.

Associate Scientist

Will participate in molecular biology research in our drug discovery programs. The successful candidate will have an MS or BS in Biology or Molecular Biology. Experience in recombinant DNA methodology, such as gene cloning and expression and DNA sequence analysis is required.

CIBA-GEIGY offers competitive salaries, excellent benefits, superb research facilities and opportunity for substantial professional growth. Please send your resume in confidence to: **Al Aronson, Staffing Center, CIBA-GEIGY Corporation, Pharmaceuticals Division, Dept. RK, 556 Morris Avenue, Summit, New Jersey 07901.** We Are An Equal Opportunity Employer M/F/H/V.

Science Serving Mankind

CIBA-GEIGY

Research Associate Help Bring Products To Market That Will Benefit Society

We're the R.W. Johnson Pharmaceutical Research Institute (PRI), a dynamic new research and development organization within The Johnson & Johnson Family of Companies. We have the strength and backing to meet the challenges of today's competitive research environment, and establish PRI as one of the world's leading pharmaceutical R&D companies.

We have an immediate opening within our Microbiology Department for a candidate with a BS/MS or equivalent in Microbiology, Biochemistry or related field. To qualify, a knowledge of microbial physiology or biochemistry, an understanding of the pathogenesis of infectious diseases, or experience in drug discovery of antimicrobial agents is required. Some industrial experience involving purification of macromolecules, use of FPLC, molecular biology techniques, or screen development is desired.

The successful candidate will conduct experiments with bacterial and fungal *in vitro* test systems towards the discovery of novel therapeutic agents.

We offer a competitive salary and the comprehensive benefits you would expect from a Johnson & Johnson Company. Please send resume, including salary requirements, to: **G. Scott-Higgins, Dept. 8, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, New Jersey 08869-0602.**

An Equal Opportunity Employer M/F



R W JOHNSON

PHARMACEUTICAL RESEARCH INSTITUTE

BIOTECHNOLOGY

RESEARCH ASSISTANT & ASSOCIATE

CARDIOVASCULAR RESEARCH

Cetus Corporation, a leading biotechnology company, is currently seeking both an Assistant and an Associate to conduct research in the cardiovascular area.

Requirements include a BS/MS in science, experience with mammalian cell cultures, and familiarity with standard biochemical techniques. For the Associate position, extensive biochemical experience and/or experience in small animal surgery is also required.

Cetus offers an excellent benefits package along with a collaborative environment that encourages career and personal growth. For consideration, please send your resume to: Cetus Corporation Box 89239/RI, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.



National Institute of Child Health and Human Development
National Institutes of Health

POSTDOCTORAL FELLOWSHIP POSITION

A three year postdoctoral position is available for a U.S. citizen or a permanent resident to join ongoing research on the EXPRESSION OF REPEAT SEQUENCE NUCLEIC ACIDS AND THEIR ROLE IN EUKARYOTIC GENE EXPRESSION. Applicants should have some experience in molecular biology and an interest in eukaryotic cell biology and growth. Salary will be commensurate with education and experience. Applicants with full CV and the names of three references should be addressed to:

Richard J. Maraia, M.D.
Human Genetics Branch,
NICHD/NIH
Building 10, Room 9S242
9000 Rockville Pike
Bethesda, Maryland 20892



NIH is an Equal Opportunity Employer

Research Scientist Bone Biology

ZymoGenetics, Inc., is a Seattle-based biotechnology company at the forefront of wound repair and growth factor research.

We currently seek a scientist experienced with **in vivo** models of bone remodeling, osteoporosis, fracture healing or other clinically relevant animal models of bone growth and hard tissue repair. Experience with evaluation of biologically active proteins in bone growth and repair is also desirable. The ideal candidate will demonstrate creativity, independent research skills and the ability to work well in a collaborative environment. Candidates should possess a PhD or D.V.M. and postdoctoral or equivalent experience.

We offer a stimulating scientific environment, state-of-the-art facilities and job flexibility. Our salaries and benefits are competitive and Seattle is renowned for its livability. For consideration, please send CV and a brief summary of recent research activities to: **Human Resources, ZymoGenetics, Inc., 4225 Roosevelt Way NE, Seattle, WA 98105, Tel: (206) 547-8080. E.O.E.**

ZYMOGENETICS

Vice President Research and Development

IOLAB Corporation, a member of the Johnson & Johnson family of companies, is a leader in ophthalmic research and development. We are currently seeking a qualified individual to become the V.P. of Research and Development for our rapidly growing Pharmaceutical Division. This position is located at our Southern California headquarters.

The ideal candidate will possess seven to ten years upper level managerial experience in an industrial pharmaceutical research and development environment. A Ph.D. in Pharmacology, Physiology or Bio-Chemistry is required.

IOLAB is committed to being an equal opportunity employer, and encourages women and minorities to apply. For consideration, please submit your resume with salary history to: **IOLAB Corporation, 500 IOLAB Drive, Claremont, CA 91711.**



a Johnson & Johnson company

NATIONAL INSTITUTE OF MENTAL HEALTH



Alcohol, Drug Abuse and Mental Health Administration
U.S. Public Health Service

DIVISION OF BASIC BRAIN AND BEHAVIORAL SCIENCES

The National Institute of Mental Health's expanding commitment to basic neuroscience and behavioral science research has created openings for a number of important positions in the Division of Basic Brain and Behavioral Sciences. The Division seeks applications from experienced and talented scientists to fill vacancies at the branch and program level in seven major multidisciplinary branches. Vacancies exist within the following divisional structure as indicated by asterisks (*):

- ✧ *Basic Behavioral and Cognitive Sciences Research Branch**
 - Basic Behavioral Processes Program*
 - Cognition, Learning and Memory Program
 - Theoretical and Computational Psychology Program*
- ✧ *Basic Prevention and Behavioral Medicine Research Branch*
 - Behavioral Medicine Program
 - Populations at Risk Program
 - Prevention and Behavior Change Program*
- ✧ *Cognitive and Behavioral Neuroscience Research Branch**
 - Behavioral Neuroscience Program
 - Cognitive Neuroscience Program*
 - Theoretical Neuroscience Program*
- ✧ *Neuroimaging and Applied Neuroscience Research Branch**
 - Neural Systems Program*
 - Neuroimaging Program*
 - Neuroscience Centers Program
- ✧ *Personality and Social Processes Research Branch**
 - Interpersonal and Family Processes Program*
 - Personality and Emotions Program
 - Sociocultural and Environmental Processes Program*
- ✧ *Psychopharmacology Research Branch*
 - Behavioral Pharmacology Program
 - Neuropharmacology Program*
 - Psychotherapeutic Drug Development Program*
- ✧ *Molecular and Cellular Neuroscience Research Branch**
 - Developmental Neuroscience Program*
 - Neurogenetics Program*
 - Neuroimmunology/Neurovirology Program*
 - Neurotransmitter/Neuroregulation Program

Branch Chiefs are responsible for leading the national research effort in a particular multidisciplinary branch. The annual budget for each branch ranges from \$10-\$21 million with a staff of 6-8 people each. Branch Chiefs plan, develop, coordinate, and fund national and international programs of support for research and training in the substantive area. Since the research scope crosses a number of scientific disciplines, Branch Chiefs must have broad administrative and supervisory experience in the administration of biomedical and/or behavioral research. Applicants must possess significant research experience, good oral and written communication skills and a recognized interest in and a capacity for extramural science management. Minimum qualifications include a M.D., Ph.D., or equivalent training in one of the following disciplines: biology, health sciences, neurosciences, pharmacology, psychology, psychiatry, genetics, immunology, virology, or in an academic field related to the mental health sciences pertinent to the work of the position. The grade of Branch Chief positions is at the GM-15 level, with a salary range from \$59,216 to \$78,200 per annum.

Program level positions have responsibility for planning, developing and administering a specific substantive program of support. Program heads are recognized authorities in their field and analyze current research activities; identify extramural research areas of underdevelopment; and stimulate the submission of grant applications in the program's field of

emphasis. Applicants must possess a M.D. or Ph.D. degree, or equivalent training, as above. In addition, must have good oral and written communication skills, and have an interest in science management. 3 years of postdoctoral experience is desirable. The grades of these positions are at the GS-13/14 level, with a salary range from \$42,601 to \$72,954 per annum.

Medical Officers may be eligible for an additional physicians comparability allowance (PCA) of \$8,000 to \$20,000 per annum for the GM-15 positions and \$5,000 to \$10,000 for the GS-13/14 positions.

Benefits include a retirement plan, health and life insurance, sick and annual leave. Relocation expenses may be paid. Duty station is Rockville, MD. United States citizenship is required.

Vacancies will be filled through the Civil Service or an appointment in the Commissioned Corps of the U.S. Public Health Service. *Applications from women and minority group members are encouraged.* Interested applicants should submit an SF-171 (Application for Federal Employment) accompanied by a current curriculum vitae and bibliography. Applications for this announcement will be accepted until *December, 1990*. Submit applications to: Ms. Louise Turner, Personnel Operations, NIMH, Room 15C12, 5600 Fishers Lane, Rockville, Maryland 20857, or call (301) 443-5407.

✧ **ADAMHA IS AN EQUAL OPPORTUNITY EMPLOYER** ✧

POSITIONS OPEN

RESEARCH ASSOCIATE. Research in muscle anatomy, histology, histochemistry, immunocytochemistry, quantitative EM, mechanics, and SDS-PAGE; write publications and grant proposals. Requirements: Ph.D. in animal science/physiology, 3 years of postdoctoral experience; 35 hours per week; \$17,000 per year. Submit résumé or curriculum vitae to: **Philadelphia Job Bank Office, 444 North 3rd Street/3rd Floor, Philadelphia, PA 19123. Job order No. 4304913.**

ASSOCIATE SCIENTIST. Forty hours per week, 8:30 a.m. to 5:00 p.m., \$39,000 per year. Design and commissioning of high-performance data acquisition systems for high-energy physics colliding beams and fixed target experiments. This includes evaluation of RISC architecture computers and work stations based on such architecture for on-line trigger systems; research on the use of VME-based RISC and purpose built parallel processing computers for data gathering and control of a LEVEL3 trigger system with the UNIX operating system; conducting feasibility studies for upgrading the currently envisioned LEVEL3 trigger system for future high luminosity experimentation. Ph.D. in physics as well as 2 years of experience as an associate scientist or as a postdoctoral researcher required. Previous direct or related experience must include evaluation of a LEVEL3 trigger system in high-energy physics particle collider experimentation as evidenced by publication of one or more articles or conference papers on data acquisition in such an environment. Send résumés to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605, Attention: Connie M. Evans, Reference #V-IL-1002-E. An employer-paid ad.**

SENIOR RESEARCH TECHNOLOGIST

Research hospital is seeking a qualified technologist to maintain cultured human and animal cell lines and prepare membrane fractions from these cells for studies of membrane transport proteins. This individual will also use rapid sampling techniques and animal tissues (1- to 30-second uptake intervals) to study nucleoside transport in cells and membrane vesicles. Requirements include experience in cell culture, preparation of membrane fractions from cultured cells and animal tissues, and use of rapid sampling techniques for measurement of the membrane transport of small molecules. Requires B.S. with experience or a Master's degree in pharmacology, biochemistry, or biology. To apply, send résumé to: **Jack Hilzheim, Tennessee Job Service, 1295 Poplar Avenue, Memphis, TN 38104. Affirmative Action/Equal Opportunity Employer.**

SENIOR SCIENTIST I. Responsible for the development, testing, and implementation of a battery of soil tests that can be added to the primary herbicide evaluation, and for monitoring important parameters, including adsorption (binding), mobility, and persistence of herbicides in soil. Requires Ph.D. in weed/soil science. Also requires knowledge of the following subjects/processes: adsorption-desorption; mobility and persistence of herbicides in soil; advanced techniques, such as spectrophotometry, chromatography, and radiotracer methodology; and use of computers to run simulation models for herbicide leaching and for data analysis. Salary: \$39,140 per year. Entry-level position. Job and interview site: Gilroy, California. Send this ad with résumé to: **Job # BLW 13045, Box 9560, Sacramento, CA 95823-0560 not later than 7 April 1990.**

SENIOR SCIENTIST/SENIOR ANALYTICAL CHEMIST. Conduct research in complex carbohydrates related to cancer. Coordinate development of new analytical methods for oligosaccharides with ongoing research employing monoclonal antibodies, enzyme-linked immunosorbent assay, thin-layer chromatography immunostaining, and complex carbohydrate organic synthesis. Supervise three employees. Must have Ph.D. degree in biochemistry and 5 years of experience as senior scientist/senior analytical chemist or 5 years of research experience in complex carbohydrates and chemical structures of human cancer-associated antigens using analytical biochemistry and liquid chromatography. Forty hours per week, 8:30 a.m. to 5:00 p.m. \$75,000 per year. Mail résumé and copy of ad to: **DEED, 1100 North Eutaw Street, Room #212, Baltimore, MD 21201, Job #8943569. Job location: Gaithersburg, Maryland. Proof of legal right to work in the United States.**

POSITIONS OPEN

STUDY DIRECTORS

Microbiological Associates' expansion has created opportunities for Ph.D.'s with the following expertise:

IN VITRO CYTOTOXICITY. Requires 2 to 5 years of experience with a background in tissue culture and preferably experience with one or more cell or tissue based assays.

MAMMALIAN CELL MUTAGENESIS. Requires experience in cell or molecular biology and "hands on" experience with the mouse lymphoma TK⁺/TK⁻ assay and/or the CHO/HGPRT assay.

SAFETY EVALUATION OF BIOPHARMACEUTICALS. Requires 2 to 5 years of experience in molecular biology, gene cloning, and mammalian cell culture relating to virology.

Our state-of-the-art facility is located in the northern suburbs of Washington, D.C. Join us as we build on our 40-year commitment to high-quality science.

Microbiological Associates, Inc.
Life Sciences Center
9900 Blackwell Road
Rockville, MD 20850
Telephone: 301-738-1000

Equal Opportunity Employer, M/F/H/V.

SENIOR RESEARCH ASSOCIATE for a medical care and research center in northeastern Ohio to develop a research protocol to examine the effects of epidermal growth factor on the growth and differentiation of human endometrial cells in serum-free conditions; study the interaction of epidermal growth factor with estradiol and progesterone; conduct interviews with gynecological patients scheduled for hysterectomy to ascertain suitability of tissue sampling; perform retroactive chart review of gynecological history to ensure presence of histologically normal tissue. Collect and prepare postoperative tissues; establish culture system for human endometrial cells in the absence of serum; characterize tissues to determine growth characteristics of human endometrial cells in serum-free conditions; measure the effects of estradiol and progesterone on the rate of cell growth; determine the effects of epidermal growth factor on growth of human endometrial cells in serum-free conditions; and epidermal growth factor to cultures previously treated with estradiol or progesterone and study the results; prepare findings for publication. Applicants will qualify with 6 months of experience in above duties, M.D. or foreign equivalent as determined by approved credentials evaluation agency; and must have published at least one scholarly research article in a professional medical journal. Forty hours per week, 8 a.m. to 5 p.m.; \$25,100 per year. *Must have proof of legal authority to work permanently in the United States.* Qualified applicants send résumé in duplicate to: **L. Eggleston, JO# 1084519, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

ANNOUNCEMENTS

The Center for Indoor Air Research, a new nonprofit corporation which sponsors objective scientific research on the full gamut of indoor air research topics, has available its 1989/1990 Request for Applications booklet. For the provision of sufficient time for the Science Advisory Board and peer-review process to occur, applications for 1 January 1991 funding must be received by 31 July 1990. For more information on the Center for Indoor Air Research and/or a copy of the Request for Applications booklet, call or write:

Center for Indoor Air Research
1099 Winterson Road, Suite 280
Linthicum, MD 21090
Telephone: 301-684-3777

COURSES AND TRAINING

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: **Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S, 424 Beacon Street, Boston, MA 02115.**

COURSES AND TRAINING

TEACHING ASSISTANTSHIPS (including tuition waiver) available for qualified applicants beginning September 1990. Graduate study leading to M.S. or Ph.D. with concentration in biochemistry, botany, ecology, marine biology, microbiology, molecular and cellular biology, physiology, or vertebrate biology. For information, contact: **Graduate Coordinator, Department of Biology, Northeastern University, Boston, MA 02115. Northeastern University is an Equal Opportunity/Affirmative Action/Title IX Employer.**

PRE- AND POSTDOCTORAL TRAINING IN TOXICOLOGY. Pre- and postdoctoral trainee positions, supported by the National Institute of Environmental Health Sciences (NIEHS), are available at Oregon State University (OSU) through the Toxicology Program and the Environmental Health Sciences Center. Trainees will engage in research with emphasis on basic mechanisms for toxicity of environmental agents. Fellowships are available on a competitive basis to applicants (*U.S. citizens and permanent residents only*) with training in chemistry, biochemistry, pharmacology, or the biological sciences. To apply for a NIEHS fellowship, send curriculum vitae, academic records, and three letters of reference to: **Donald R. Buhler, Ph.D., Chairman, Toxicology Program, Environmental Health Sciences Center, Oregon State University, Weniger Hall 317, Corvallis, OR 97331-6504. Telephone: 503-737-2363. Closing date is 30 April 1990. OSU is an Equal Opportunity/Affirmative Action Employer and complies with Section 504 of the Rehabilitation Act of 1973.**

MEETINGS

VASOACTIVE PEPTIDES AND HYPERTENSION

Satellite Symposium of the 13th Scientific Meeting of the International Society of Hypertension, Montreal, Canada.

SUNDAY, 24 JUNE 1990
THE MONTREAL CONVENTION CENTRE
201 VIGER AVENUE WEST
MONTREAL, QUEBEC, CANADA

Convenors: Dr. M. Cantin and Dr. D. Regoli.

Speakers: Dr. P. B. M. W. M. Timmermans, Dr. H. Brunner, Dr. J. M. Pollak, Dr. D. Regoli, Dr. P. M. Van Houtte, Dr. V. Dzau, Dr. D. Ganten, Dr. M. J. Dunn, Dr. O. Carretero, Dr. T. Masaki, Dr. C. Ferrario, Dr. E. L. Schiffrin, Dr. D. J. DiPette, Dr. G. Plante, Dr. H. Gavras, Dr. G. Samuels, Dr. E. J. Sybertz.

Registration fee (includes lunch): \$50.00; students, \$25.00. Inquire to: **Ms. V. Jodoin, Clinical Research Institute of Montreal, 110 Pine Avenue West, Montreal, Quebec, Canada H2W 1R7. Telephone: 514-987-5602. FAX: 514-987-5675.**

FELLOWSHIPS



WADLEY BIOSCIENCES CORPORATION
LYMPHOKINE PARTNERS LTD

POSTDOCTORAL FELLOW and RESEARCH ASSISTANT positions are available for research in the isolation and characterization of new human cytokines via gene cloning and construction of multifunctional cell factors via in vitro intergeneric fusions. The research is a major part of the research and development program of this leading biotechnology company which is well supported, innovative, and centrally located to other Dallas medical research institutions. Candidates should have excellent backgrounds in biochemistry/molecular biology although experience in immunology and cytokine research would be advantageous. This is an opportunity for professional growth not only scientifically but also as a participant in the development of an exciting biotechnology company which has been recognized for its business and scientific strength.

Interested parties should send their curriculum vitae and three letters of reference to:

Dr. Arthur P. Bollon, President
Wadley Biosciences Corporation
Lymphokine Partners Ltd.
1720 Regal Row, Suite 215
Dallas, TX 75235

HEALTH SCIENTIST ADMINISTRATORS

NATIONAL CENTER FOR HUMAN GENOME RESEARCH NATIONAL INSTITUTES OF HEALTH (NIH)

The National Center for Human Genome Research seeks outstanding candidates with a Ph.D. or M.D. and experience in molecular *biology or genetics* to serve in the Human Genome Program at NIH in Bethesda, MD. The areas for which candidates are sought are:

- Informatics
- International Coordination
- Human Genetics, Molecular Biology

Candidates must have at least three years of postdoctoral training and significant scientific experience beyond the postdoctoral level. The duties of the positions will include administration of a portfolio of research and training grants relating to the subject area, maintaining a thorough knowledge of ongoing genome projects in that area, and advising the Center Director on policy development regarding genome issues. The position for international coordination will require substantial travel for the purpose of establishing strong international ties for the NIH genome project and assessing the state of genome projects in other countries. The salary range is \$42,600 to \$65,000 or may be negotiable commensurate with qualifications and experience. Interested candidates should submit curriculum vitae and names of three references to:

Ms. Karen Thomas
National Institutes of Health
Building 31, Room 1C27
9000 Rockville Pike
Bethesda, MD 20892
(301) 496-2400



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

GORDON RESEARCH CONFERENCES ASSISTANT TO THE DIRECTOR

Well-established firm, tax-exempt, nonprofit, Rhode Island based, multi-location of operations.

Individual must have earned PhD in either Chemistry, Physics or Biological Sciences, be free to travel, live and work approximately 6 months a year away from home office.

The individual is responsible for development and implementation of fundamental proposals for scientific meetings. Grant-Contract experience with government agencies and foundations essential. Requirements include exceptional management expertise with emphasis on organizational and interpersonal skills. Knowledge and use of Digital MicroVax 3400 computerized system necessary for on-line planning.

Individual must be detail-conscious and interact effectively at all levels within the organization. Requires strong verbal and written communication skills. "Hands-on" contact with professional, research-oriented, high-profile academic, government and industrial scientists.

Competitive Salary—Generous Fringe Package—Non Smoking Environment

Letter of application, resume, references, and salary requirements should be mailed to:

Dr. Alexander M. Cruickshank, Director
Gordon Research Conferences
Gordon Research Center
University of Rhode Island
Kingston, RI 02881



PLANT TAXONOMIST

Missouri Botanical Garden, a premier institution of its type, is actively seeking candidates for a plant taxonomist position in its Division of Horticulture.

The position involves the formulation and implementation of collections policy to maintain diversification of the Garden's many living collections; the plant taxonomist will manage the plant records data base inclusive of identifying plants in the living collection and updating nomenclature, and will coordinate our participation in the Center for Plant Conservation. In addition, responsibilities include extensive involvement in writing interpretative material: plant labels, explanatory pamphlets for displays, educational brochures about the plants, and articles for the Garden's *Bulletin*. There will be significant and ongoing collaborative activities between this horticultural division position and research division staff and professionals of numerous disciplines. The chosen applicant will be challenged to identify, access and put into cultivation native plants of Missouri and surrounding regions with emphasis on plants of botanical and horticultural merit.

The position affords an opportunity to increase and nurture an already extraordinary collection. Those who possess a Ph.D. in botany or Master's with equivalent experience are invited to apply. Fully qualified applicants will demonstrate in-depth knowledge of plant classification. Minimum of five years work-related experience inclusive of supervisory responsibility is required.

In addition to the outstanding opportunity inherent in the position, Missouri Botanical Garden offers an exceptionally stimulating and supportive work environment and provides competitive wages and benefits, including a generous employer contribution to a Tax Deferred Annuity Program.

Qualified candidates are encouraged to apply immediately; applications will be accepted until the position is filled. Submit your curriculum vitae and three letters of reference to:

Director, Human Resources
Missouri Botanical Garden
P.O. Box 299
St. Louis, Missouri 63166

Equal Opportunity Employer. Minorities and women encouraged to apply.

ABBOTT LABORATORIES

Abbott Laboratories' Pharmaceutical Products Division is a leader in the development and manufacture of anti-infective, cardiovascular and anti-convulsant/neurological products. Supported by a significant investment to R&D, twice the industry standard, we maintain a variety of specialized labs featuring state-of-the-art developmental technologies. Our extensive technical resources create a superior environment for those who would like to make a significant personal and professional commitment.

ENDOCRINOLOGIST

Pharmaceutical Products Division

A reproductive endocrinologist is needed to design and implement in-vivo testing strategies in the General Pharmacology department. The selected candidate will possess a Ph.D. in endocrinology, physiology or pharmacology, with 2-3 years postdoctoral experience in reproductive research. An extensive knowledge of reproductive function and control is required, with experience in animal surgery and methods for evaluation of effects on ovulation and spermatogenesis. Familiarity with experimental models of prostatic cancer and endometriosis, and methods for in-vitro fertilization (IVF/GIFT) is desirable.

Abbott Laboratories offers each employee an environment in which to build a distinguished career, and provides competitive compensation and benefits including a profit sharing and stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. If you believe that you can benefit from a long-term association with Abbott, and your credentials meet the indicated requirements, please send your resume with salary history to: **Patricia Handy, Corporate Placement, Job #7613, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** (To facilitate the handling of your resume, please indicate Job Number on your cover letter or resume.) Abbott is an Affirmative Action Employer.

ABBOTT LABORATORIES



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POSTDOCTORAL POSITION

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

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

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

Equal Opportunity Employer M/F/H/V

Geisinger

POSTDOCTORAL FELLOWSHIP

Post-doctoral fellowship position is available at the National Institute on Alcohol Abuse and Alcoholism, for studies of the molecular pharmacology and regulation of hormone receptors. Preference is given to applicants with experiences in protein purification and receptor biochemistry/ pharmacology. Salary is commensurate with experience. Only U.S. citizens or permanent residents are eligible for this position. Send CV and name of three references to:

Dr. George Kunos
Laboratory of Physiologic
and Pharmacologic Studies
NIAAA
12501 Washington Avenue
Rockville, MD 20852
Telephone (301) 443-1234



NIAAA is an Equal Opportunity Employer

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. The Reingold ECG Center, Cardiology Section, at Northwestern University Medical School is seeking a candidate who will study the effects of inotropic agents on cardiac cellular electrophysiology and intracellular calcium transients (using indo-1 fluorescence). M.D. and/or Ph.D. required; experience with cellular electrophysiological techniques preferred. Send curriculum vitae and three letters of reference to: **Dr. J. Andrew Wasserstrom, Reingold ECG Center, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** An Equal Opportunity/Affirmative Action Employer. Employment eligibility verification required upon hire.

PREDOCTORAL AND POSTDOCTORAL FELLOWSHIPS

The University of Texas at Austin and the University of Texas M. D. Anderson Cancer Center—Science Park Research Division at Smithville jointly sponsor a training program in tumor biology and cancer. This program provides pre- and postdoctoral training in a variety of research disciplines concerning cellular and molecular biology of oncogenesis. Research faculties are outstanding and participating investigators have strong, well-funded research programs. Participating faculty include:

Henry R. Bose, Jr.: Transformation of lymphoid cells by the *v-rel* oncogene.

Dennis T. Brown: Synthesis, transport, and modification of membrane glycoproteins.

Jaquelin P. Dudley: Carcinogenesis by retroviruses.

Paul D. Gottlieb: Mechanisms of cytotoxic T cell recognition and function.

Michael C. MacLeod: Interaction of carcinogens with biological macromolecules.

Richard J. Meyer: Replication of broad host-range plasmids.

Ellen R. Richie: Tumor suppressor genes in carcinogenesis.

Bob G. Sanders: Modulation of retrovirus-induced immune dysfunction and tumorigenesis.

Tom Slaga: Cellular and molecular mechanisms of chemical carcinogenesis.

James R. Walker: *E. coli* chromosome replication.

Interested students should write: **Dr. Henry R. Bose, Jr., Department of Microbiology, The University of Texas at Austin, Austin, TX 78712** for information and an application form. Prospective postdoctoral fellows should send a résumé and description of research background to the appropriate faculty member(s) at the above address. *Minority applicants are encouraged to apply. The University of Texas is an Equal Opportunity/Affirmative Action Employer.*

SITUATIONS WANTED

CLINICAL PHYSIOLOGIST, Ph.D. (catecholamines). Experience in physiological evaluation, assay development, instrument design, legal and business aspects of intellectual property protection. **Box 25, SCIENCE.**

ENVIRONMENTAL SCIENTIST, Ph.D. Currently monitoring LLRW repository development. Academic/industry/project management experience; OSHA HAZMAT-certified. Geology, hydrology, chemistry background. **Box 23, SCIENCE.**

EXPERIMENTALIST, Ph.D., 20 years of university research experience, seeks industrial/academic research position: SEM/EDXS, XRD, hydrothermal, and controlled atmosphere furnace expertise. **P. Freeborn, 65 Park Avenue, Poughkeepsie, NY 12603.**

IMMUNOLOGIST, Ph.D. Background in human tumor immunity, hybridomas, monoclonal antibodies, and cell culture. Seeking management position in biotechnology R&D. **Box 26, SCIENCE.**

MICROBIOLOGIST/BIOCHEMIST, Ph.D. Experience: diagnostic reagent development, reagent adaptation to instrumentation, product production via fermentation, research, process development, regulatory. **Box 24, SCIENCE.**

FIRST-YEAR LAW STUDENT seeks summer position. Environmental policy and sociology doctorate expected 1990 (Yale). Diverse experience. B.A. geology, M.S. geography. **Box 27, SCIENCE.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP IN BIOTECHNOLOGY

ICI Pharmaceuticals is one of ICI's major international business areas . . . with an outstanding record of achievement and innovation.

We are now offering a 2-year fellowship in our Biotechnology Department at our research complex in Cheshire, close to the Peak District and only 18 miles south of Manchester.

You should have a Ph.D. in biochemistry and experience in the purification and chemical/biochemical characterization of glycoproteins.

It would also be advantageous if you have postdoctoral experience in glycolipids or proteoglycan characterization. A working knowledge of FAB-MS, GC-MS, and/or ¹H-NMR of oligosaccharides would also be useful.

You will be expected to complement our existing expertise in glycoconjugate characterization and to apply your talents to both native and recombinant glycoproteins in the search for new therapeutic approaches.

Interested candidates should write with full curriculum vitae, quoting **Reference AMS/LP**, to: **The Personnel Department, ICI Pharmaceuticals, Mereside, Alderley Park, Nr Macclesfield, Cheshire SK10 4TG, England.**

MARKETPLACE

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POSITION AVAILABLE
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NATIONAL INSTITUTE ON DRUG ABUSE
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
PUBLIC HEALTH SERVICE
DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Alcohol, Drug Abuse, and Mental Health Administration invites nominations and applications for the position of Director, Medications Development Division, National Institute on Drug Abuse.

This is a Senior Executive Service position in the career civil service, with an annual salary range of \$71,200 to \$79,200. Physicians may also be eligible for a Physicians' Comparability Allowance of up to \$20,000 per year. The position is located in Rockville, Maryland.

The Director, Medications Development Division provides programmatic, administrative, and general management of the five branches of the Division: the Biometrics Research Branch, the Clinical Trials Branch, the Regulatory Affairs Branch, the Chemistry and Pharmaceuticals Research Branch, and the Pharmacology and Toxicology Branch. The Director is also responsible for coordinating the activities and medications development requirements of the three ADAMHA Institutes into the scientific and management activities of the Division and maintains close contact with designated medications development staff at the National Institute on Alcoholism and Alcohol Abuse and the National Institute of Mental Health.

The Director is also responsible for maintaining close working relationships with senior staff at the Food and Drug Administration on matters relating to operational and scientific procedures involved in medications development as well as the development of policy affecting ADAMHA's programs. Additionally, the Director provides authoritative advice and consultation to senior agency officials on a wide range of matters pertaining to the treatment of brain and behavior disorders and the pharmacological evaluation of new treatment agents.

Minimum qualifications requirements include a degree of Doctor of Medicine, Doctor of Osteopathy, or a bachelor's degree or higher degree in an academic field related to the health sciences pertinent to the work of the position. Candidates must demonstrate evidence of progressively responsible experience in managing large, complex science/research programs in the biomedical/behavioral areas; supervising or collaborating with senior-level scientists in academia, private industry, or the Federal Government; extensive current knowledge of research methodology in the biomedical, behavioral, pharmacological, or clinical sciences in areas relevant to drug abuse.

Further information about the position and qualifications requirements may be obtained by contacting Ms. Leslie Everheart at (301) 443-5030. An SF 171 (Application for Federal Employment) accompanied by a current curriculum vitae and bibliography should be submitted to Ms. Everheart at the Division of Personnel Management, Alcohol, Drug Abuse, and Mental Health Administration, 5600 Fishers Lane, Room 15C-26, Rockville, Maryland 20857. Complete Application material (including the SF 171) must be postmarked by the closing date of April 30, 1990. *Resumes are not acceptable for entrance into the Senior Executive Service.*

Applications from women and minority group members are encouraged.

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Applicants should have a Ph.D. or M.D. degree with post-doctoral research training in one of the following areas: transplantation immunology; immunochemistry; immunopharmacology; tumor immunology. The successful candidate will be expected to establish a strong independent program and will be encouraged to interact with other basic or clinical scientists in the Research Institute. Excellent office and laboratory space and equipment are available in the Division of Surgical Research. Salary, rank and start-up funds are negotiable. The successful candidate will be appointed to the Department of Surgery of the University of Toronto. Cross-appointment to other departments is possible.

Please send a Curriculum Vitae and the names of three references, quoting file #E023 and post-marked no later than May 18, 1990, to: Cho Y. Pang, Ph.D., Chairman of the Search Committee, Division of Surgical Research, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario, Canada M5G 1X8.



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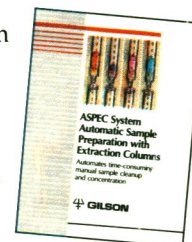
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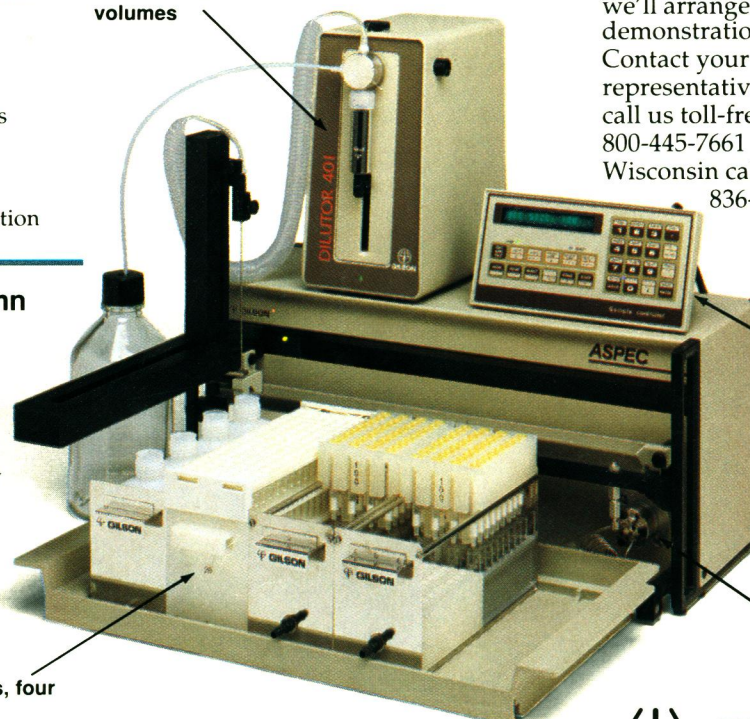
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