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INTERNATIONAL CONFERENCE ON ISSUES IN FOOD SAFETY AND TOXICOLOGY

Tuesday May 29 -- Friday June 1, 1990

KELLOGG CENTER

MICHIGAN STATE UNIVERSITY

EAST LANSING, MICHIGAN

Sponsored by:

U.S. DEPARTMENT OF AGRICULTURE

and

MSU CENTER FOR ENVIRONMENTAL TOXICOLOGY

FORTY SPEAKERS INCLUDE:

Dr. Lester Crawford, Dr. Gilbert Leveille, Dr. Sanford Miller
Dr. John Moore, Dr. Michael Partza, Dr. Bernard Wagner
Dr. Walter Willett, Dr. Catherine Woteki, Dr. Ernst Wynder

Attendance at the Conference is limited and early registration is recommended. Early registration fee is \$250 which includes cost of scheduled meals. After May 10 registration fee is \$325.

For registration materials please contact:

Mary D. Lipson, M.A.
Conference Manager
A-132 East Fee Hall
Michigan State University
East Lansing, MI 48824
(517) 355-4486

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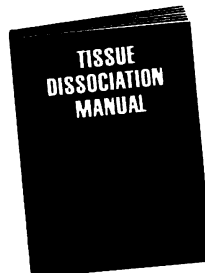


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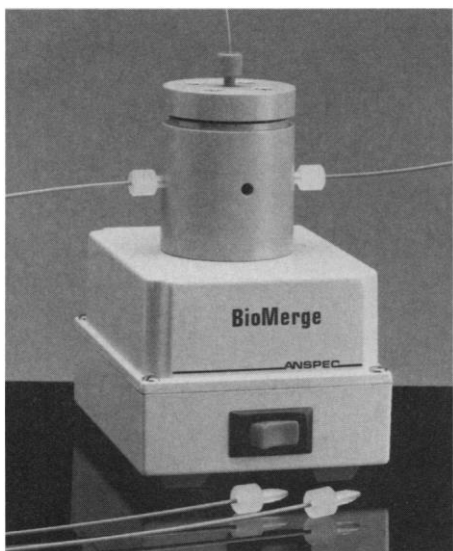
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The BioMerge can blend up to four solvents accurately and reproducibly. The mixer, inert to most organic solvents, can replace the stainless steel components in a high-performance liquid chromatography



(HPLC) system for complete biocompatibility. The design features three separate mixing chambers, each with a magnetically driven stir bar. The total volume can be adjusted to optimize the mixing performance at different flow rates. Anspec. Circle 452.

Data Analysis and Graphing Program

PLOT is an interactive data analysis and graphing program for scientific and engineering users with MS-DOS systems. Flexible data handling and unlimited complexity of output graphs with multiple fonts and multiple graphs on a single page allow the scientist to view data in a number of ways. For data analysis, PLOT features nonlinear, polynomial and spline fitting, and signal processing procedures. User-definable functions complement an extensive list of built-in commands and functions. In addition to MS-DOS, PLOT is available for VAX 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.

puters running VMS, Convex minisupercomputers, SUN workstations (including SparcStations), and HP computers and workstations running HP-UX. The program requires 640K memory, a graphics adapter and display, and a hard drive with at least 1 MB free. New Unit. Circle 448.

Portable Spectroscopy Workstation

The Portable PLUS is a portable and battery-powered integrated spectroscopy workstation. The system mates a laptop personal computer with the Model 1150 Portable PLUS Acquisition Unit in a rugged carrying case. The Portable PLUS is designed for germanium gamma spectroscopy. The acquisition unit features 4K memory, a 100-MHz analog-to-digital converter, and a programmable high-voltage power supply. Canberra Industries. Circle 458.

Universal Gradient System Controller

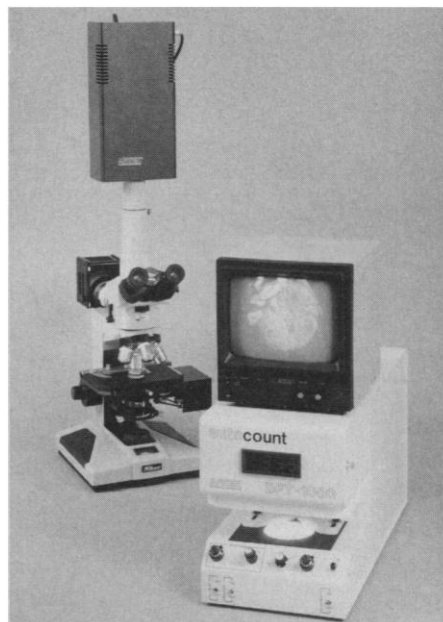
The SankiGrad, designed to be used with a single pump and an IBM-compatible computer, can be used to produce gradients for high-performance liquid chromatography, centrifugal partition chromatography, electrophoresis, and other liquid chromatography techniques. The system is controlled by menu-driven software that guides the operator to set up gradient files, store them on disk, and run gradients. SankiGrad occupies only a single slot in the computer. Sanki Laboratories. Circle 474.

Floating pH Electrode Holder

A pH electrode holder floats freely in a vertical position, allowing the enclosed electrode to make accurate measurements in the middle of a river, pond, or stream. Manufactured of durable polyvinyl chloride, the corrosion-resistant holder can withstand temperatures up to 70°C. The manufacturer can provide a range of electrodes, enabling a wide variety of parameters to be monitored. Russell pH. Circle 475.

Automatic Object Counter

The Autocount can count up to 1000 objects such as bacteria colonies, plaques, cells, microscopic grains, and industrial particles in a field, displaying the totals almost instantly on a digital readout. An adjustable



aperture allows the operator to isolate an object or group of objects for separate image counting. Adjustable size discrimination eliminates objects smaller than a specific size threshold. An electronic compensator automatically corrects counts by 15% to eliminate interference from stacking rings. A flagging system marks every scanned object with an illuminated dot to show exactly which objects have been counted. Dynatech Laboratories. Circle 465.

Literature

Geological Sample Preparation Systems is a new catalog that gives an overview of a line of saws, thin section preparation systems, impregnation units, and polishing machines. Logitech. Circle 568.

The *Texwipe Master Catalog* features a selection of contamination control products for precision cleaning and preventive maintenance. The catalog includes a "Product Use Chart" for quick identification of products for computer care, electronic assembly, field service, and clean rooms. Texwipe. Circle 570.

The *Spectra/Por Dialysis Products* brochure features new dialysis membranes containing no heavy metals, no sulfides, and no glycerol. They are designed for use in desalination, purification, and concentration of samples. Spectrum. Circle 571.

Custom Immunology is a new brochure that describes the complete antibody production services and protocols offered by Berkeley Antibody. Polyclonal antisera can be generated in small and large animals against peptides, proteins, synthetic haptens, and other molecules. Berkeley Antibody Co. Circle 575.

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 x \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

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

ACADEMIC PHYSIOLOGIST. Ph.D. or M.D./Ph.D. with expertise and interest in exercise physiology, kinesiology, sports medicine, and the disabled. Full-time research position, with laboratory and clinical research work, in Department of Rehabilitation Medicine, Columbia University. Department includes established laboratory, inpatient and outpatient services, and modern sports medicine facility. Affiliated institutions include Helen Hayes Hospital, which has an active gait laboratory and Center for Rehabilitation Technology. Academic appointment and salary commensurate with experience. Send curriculum vitae to:

Stanley J. Myers, M.D., Acting Chairman
Department of Rehabilitation Medicine
Columbia Presbyterian Medical Center
630 West 168th Street
New York, NY 10032

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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. The Department of Pharmacodynamics, College of Pharmacy, University of Florida (UF), is searching for an assistant professor for a tenure-track position to join a department of pharmacologists and physiologists. Applicants must hold a Ph.D. degree, have postdoctoral training, and proven ability to conduct independent research. The candidate will be required to develop an independent research program, actively seek extramural funds, participate in team teaching of physiology and pathophysiology, and participate in graduate student training. Current research areas of the faculty are aging, neuroendocrinology, cardiovascular pharmacology, toxicology, and temperature regulation. Position will be available by September 1990. Applicants should send curriculum vitae, description of research interests and have three letters of reference sent by 1 May 1990 to: **Dr. Maureen Keller-Wood, Chairman, Search Committee, Department of Pharmacodynamics, Box J-487, JHMH, University of Florida, Gainesville, FL 32610.** *UF is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR NATURAL RESOURCES POLICY AND ADMINISTRATION

Nine-month tenure-track faculty position to begin 1 September 1990. Responsibilities include teaching graduate and undergraduate courses in natural resources administration, policy, communication and/or conflict resolution, graduate and undergraduate student advising, participation in extension activities, and providing leadership in a research program emphasizing natural resources administration and conflict resolution. A Ph.D. is required. At least one degree, or substantial work experience, in the general areas of natural resources studies is highly desirable. Demonstrated potential for excellence in teaching and research is essential. Cooperative research with state and federal natural resource agencies is desirable. Salary commensurate with experience and qualifications. Send letter of intent, official transcripts, curriculum vitae, and three letters of reference to: **Dr. William A. Patterson III, Chair, Natural Resources Policy and Administration Search Committee, Department of Forestry and Wildlife Management, 204 Holdsworth Natural Resources Center, University of Massachusetts, Amherst, MA 01003,** through 17 April 1990. Telephone: 413-545-2665. *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

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.

ASSISTANT PROFESSOR DEPARTMENT OF SURGERY YALE UNIVERSITY SCHOOL OF MEDICINE

The Gastrointestinal Surgical Research group located at the West Haven Veterans Administration Medical Center requires an M.D., Ph.D. skilled in gastrointestinal physiology with qualifications as an independent investigator. This individual should possess knowledge of the physiology of the stomach, pancreas, and colon. These skills should include isolated cell techniques, investigation of signal transduction, hormone receptor interactions, and protein phosphorylation. Administrative skill in directing and maintaining a laboratory is required as is the ability to maintain cohesive and productive interaction between basic science departments and clinical faculty. Teaching skills in the area of molecular physiology and second messenger interaction are required. Forward curriculum vitae including the names of three references by 30 April 1990 to the Director of the Gastrointestinal Surgical Research group: **Irvin M. Modlin, M.D., Ph.D., Vice Chairman and Professor, Yale University School of Medicine, Department of Surgery, 333 Cedar Street, P.O. Box 3333, New Haven, CT 06510.** *Yale is an Equal Opportunity Affirmative Action Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR DEPARTMENT OF GEOGRAPHY

Half-teaching, half-research position as assistant or associate professor, Department of Geography, College of Natural Resources, Utah State University. Tenure-track, academic year position; Ph.D. in meteorology or closely related field, established record of scholarship in meso-scale meteorology. Conduct research linking global atmospheric circulation and surface hydrologic and biosphere processes at various scales, collaborate with people working in these areas, help develop a multidisciplinary weather research lab, develop own research program in applied meteorology, and teach two or three specialty courses. Send curriculum vitae and names of four referees to: **Ted J. Alsop, Chair, Search Committee, Department of Geography, Utah State University, Logan, UT 84322-5240.** Deadline: 30 April 1990 or until suitable candidate is found. *Utah State University is an Affirmative Action/Equal Opportunity and IRCA Employer.*

The Division of Radiation and Cancer Biology, New England Medical Center/Tufts University, Boston, is recruiting an **ASSISTANT** and an **ASSOCIATE PROFESSOR** with Ph.D. or M.D. degrees. One position is for a scientist to study molecular mechanisms relevant to cancer therapy. Responsibilities include teaching radiobiology. The second position is for a scientist to study molecular events in radiation-induced damage and carcinogenesis. Experience in modern techniques of cell biology is required for both positions. To apply, submit a letter of application with a description of research interests, curriculum vitae, and three referees to: **Director, Division of Radiation and Cancer Biology, Box 824, Department of Radiation Oncology, New England Medical Center/Tufts University, 750 Washington Street, Boston, MA 02111.**

POSITIONS OPEN

BIOLOGY ASSISTANT PROFESSOR. Tenure-track position available September 1990 for a broadly trained biologist to teach in areas of cell/molecular biology and genetics in a 4-year Presbyterian-related liberal arts institution that emphasizes superior teaching. Expertise in developmental and/or microbiology desirable. Supervision of senior thesis research as well as coursework in introductory biology for majors and in general education for nonmajors are expected. Ph.D. in molecular biology or related area required; teaching experience preferred. Central location in suburban Knoxville, near Oak Ridge and the Resource Valley, offers extensive opportunities for research. Applications received by 20 April 1990 will be assured of full consideration. Send letter, curriculum vitae, and three reference letters to: **Dr. Robert Naylor, Chairman, Division of Natural Science, Maryville College, Maryville, TN 37801. Equal Opportunity Employer.**

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF PHYSIOLOGY EAST CAROLINA UNIVERSITY SCHOOL OF MEDICINE

Tenure-track position at the Assistant/Associate level available to begin 1 August 1990. Applicant must possess earned doctoral degree with extensive training in physiology and three or more years of postdoctoral experience. Area of expertise open. All candidates must have a commitment to teaching and document the potential to develop and sustain a fundable independent research program. An associate level appointment will require five or more years as an assistant professor or equivalent experience, a record of extramurally funded research, publications and experience in undergraduate medical education and graduate training. Currently the department has eight faculty members representing a wide range of molecular, cellular, and systems-oriented research in the physiological sciences. There are opportunities for collaborative research within the department or through medical school research groups in diabetes, cancer, neuroscience, immunology, allergy, and cardiovascular studies. Candidates should submit curriculum vitae and have three references sent to: **Chairman, Assistant/Associate Professor Search Committee, Department of Physiology, East Carolina University School of Medicine, Greenville, NC 27858.** Screening of applicants will begin 1 May 1990. *East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employability at the time of employment.*

ASSISTANT RESEARCH PROFESSOR. Department of Radiation Medicine, University of Kentucky, Lexington, Kentucky. University of Kentucky is seeking an assistant research professor in radiation biology (non-tenure track) with a documented background in pharmacology, hyperthermia as well as radiation biology. Candidate must have a Ph.D. and at least 2 years of postdoctoral experience. It is required that this candidate establish his research funding in 2 years to continue this appointment. Salary is negotiated.

Please address replies with curriculum vitae to: **Professor M. Urano, M.D., Ph.D., Department of Radiation Medicine, University of Kentucky Medical Center, Room C-15, Lexington, KY 40536-0084. An Equal Opportunity Employer.**

ASSISTANT OR ASSOCIATE RESEARCH OR ASSISTANT OR ASSOCIATE ADJUNCT PROFESSOR. The Division of Pulmonary/Critical Care Medicine, University of California, Davis, School of Medicine, is recruiting for a full-time academic research position. Candidates must possess a Ph.D. equivalent or M.D. with at least 2 years of postdoctoral research experience. The division has a strong clinical program and is seeking an individual with extensive research experience in lung cell/molecular biology. Collaborative faculty are available in the following areas: mucus glycoprotein biosynthesis, airway cell culture systems, lung inflammation, lung anatomy and pathology, lung collagen and elastin metabolism, inhalation toxicology, respiratory tract carcinogenesis, and lung oxidant damage and antioxidant protective systems. Interested applicants should send curriculum vitae to: **Timothy Albertson, M.D., Ph.D., Division of Pulmonary/Critical Care Medicine, University of California, Davis, Medical Center, 4301 X Street, #2430 Professional Building, Sacramento, CA 95817 by 31 August 1990. The University of California, Davis, is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR. One long-term tenure-track faculty position. Begin late August 1990. Ph.D. required, some teaching experience in anatomy/physiology. Expected to teach upper and lower division courses, conduct research with undergraduate biology majors, and develop innovative nonscience courses. Liberal arts environment. Some possibilities of graduate teaching. Letter stating interests, complete résumé, transcripts, and three letters of reference due prior to 21 April 1990 to: **Sister John Karen Frei, Associate Vice President, Academic Health Science Center, Barry University, Miami Shores, FL 33161.**

RESEARCH ASSISTANT PROFESSOR

O.D. and Ph.D. in physiological optics or visual neuroscience. Must have Texas optometry license; clinical optometric experience with pediatrics, binocular vision problems, infant vision, and contact lens fitting; and expertise in human visual electrophysiology. Send curriculum vitae, publications list, and names and addresses of three references to:

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

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 bio-organic 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.**

PROFESSOR IN EXPERIMENTAL PATHOLOGY

Vanderbilt University School of Medicine and the Department of Pathology are seeking a senior scientist for the endowed Ernest Goodpasture Chair in Experimental Pathology. Candidates should hold an M.D., Ph.D., or M.D./Ph.D. degree, must qualify for a senior faculty appointment with tenure in the university, and should be an internationally recognized immunologist who can provide scientific leadership for basic investigative programs in either immune response or immunogenetics. United States citizenship is not a strict requirement but is preferred; the chair holder should be eligible for U.S. government funding.

Appropriate space for this program will be made available within the Department of Pathology with provisions for support of a junior faculty position at the level of assistant professor for 3 years.

Send applications to: **Robert D. Collins, M.D., Chairman, Goodpasture Search Committee, Department of Pathology, Vanderbilt University Medical Center, Nashville, TN 37232-2561.**

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

FRED HUTCHINSON CANCER RESEARCH CENTER ASSISTANT MEMBER POSITION HUMAN IMMUNOGENETICS PROGRAM

We are seeking a molecular biologist with interest and experience in the study of human MHC genes. Will work with clinicians involved in human marrow transplantation but must be capable of generating and sustaining an active and independent program of investigation concerning MHC polymorphism, gene expression, and function. Ability to generate grant support within 2 to 3 years is expected. Send curriculum vitae and cover letter to: **Dr. Paul Martin, Search Committee Chairperson, 1124 Columbia Street, Seattle, WA 98104.** Salary depends on experience. Excellent benefits and a smoke-free environment. *Affirmative Action/Equal Opportunity Employer, M/F/H.*

THE INTERNATIONAL RICE RESEARCH INSTITUTE (IRRI) seeks four (4) Agricultural Scientists for assignment to Madagascar

The successful candidates (one of whom will be the team leader) will work in collaboration with Malagasy national scientists and officers of the National Center for Applied Research and Rural Development. All must have demonstrated ability to work as members of interdisciplinary teams and must be fluent in French and English.

Cropping systems agronomist

Duties: Collaborate with national scientists in the design, implementation, and analysis of on-station and on-farm experiments to include component technology testing and cropping pattern trials aimed at identifying sustainable increases in the productivity of rice-based cropping systems.

Qualifications: Ph.D. in agronomy or related field and 5 years experience in farming systems R&D.

Plant breeder

Duties: Collaborate with national scientists in the introduction, testing, cross-breeding, and evaluation of rice germplasm for higher yield, resistance to pests, cold tolerance, and adaptability to the major rice environments of Madagascar.

Qualifications: Ph.D. in plant breeding or related field and 5 years experience in varietal improvement.

Soil scientist

Duties: Collaborate with national scientists in developing a comprehensive, long-term program to identify and resolve soil fertility constraints in Madagascar's wetland rice environments. Assist in nutrient dynamics research, particularly on iron toxic soils, and in identifying improved soil fertility management practices.

Qualifications: Ph.D. in soil science or related field and 5 years experience in soil fertility research.

Agro-economist

Duties: Collaborate with national scientists in developing, evaluating, and extending recommendations for rice and rice-based farming systems. Assist in farm-level diagnostic studies to identify constraints and to help set research priorities, and assist in strengthening research-extension linkages.

Qualifications: Ph.D. in agricultural economics or social sciences and 5 years experience in agricultural R&D.

IRRI is an international, non-profit, donor-funded agricultural research institute that undertakes research and training at its headquarters in the Philippines and collaborates with national agricultural systems worldwide. IRRI's goal is to develop more productive and sustainable rice technology and to strengthen national research capability. Salary and benefits will be commensurate with those of similar international institutions and programs in agriculture.

Application: Applications for the positions described will be accepted until 30 April 1990. Please submit curriculum vitae, date of availability, and the names of three referees to:

**Dr. Klaus Lampe, Director General
IRRI, PO Box 933, 1099 Manila, Philippines
FAX: 63-2-817-8470
TELEX: 40890 RICE PM or 22456 IRI PH**



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Group Leader

Lead a team of multi-disciplinary researchers in creating new commercial diagnostic systems. Requires 5+ years' experience in commercial immunoassays development and the ability to contribute in concept, feasibility testing, development, product transfer, and market release of products. PhD in Life Science or equivalent. Dept.#288/161

Sr. Scientists— Product Development

Play a key role on multi-disciplinary research teams in the development of immunoassays and diagnostic systems for infectious agents and serum analyses. Requires 3+ years' experience in development of commercial EIA's or FIA's with multiple detection techniques. PhD in Life Science or equivalent. Dept.#286/302

Sr. Production Chemist— Bio-Safety Level 3

Maintain critical cell cultures and perform virus purification for new infectious disease immunoassays. Requires 2+ years' growing HIV in a production environment, experience with protein purification, gel electrophoresis and Western blot, and familiarity with regulatory documentation. BS in Virology or related science. Dept.#280/447

Sr. Manufacturing Engineer— EIA Product Transfer

Guide and troubleshoot the manufacture of new immunoassays for the commercial clinical market. Requires 5+ years' experience in EIA product development, transfer and quality control, and familiarity with GMP's and regulatory documentation. BS or MS in Microbiology, or equivalent. Dept.#283/337

Sr. Scientist—Virology

Be the scientific advisor to support existing products and provide an outreach to the scientific community. Play a leading role in developing new retroviral-infections diagnostic products. Requires Ph.D in virology, or equivalent, and expertise in assays for the markers of HIV and HTLV. Dept. #288/169

If any of these opportunities are appealing, please submit your resume, indicating department code, to Bio-Rad Laboratories, Inc., 1000 Alfred Nobel Drive, Hercules, CA 94547. EOE.

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Schering-Plough's recent discoveries have brought us to the beginning of a new era in healthcare research. Our rich history of research has made it possible for these medical breakthroughs to come to life. Our success in the new decade and coming century depends on furthering our creative and technical expertise. We have an exceptional opportunity for a Cell Biologist to lead a group of five scientists, including PhD's, within our Cell Biology department.

In this highly visible position, you will manage and direct research projects to determine the biological activities/interactions of various cytokines. Your team's discoveries are critical in designing novel assays to assist second generation drug discovery. To qualify, you must hold a PhD in a related field and a background of 5-8 years of solid hands-on research experience in cell biology. Supervisory experience in managing a collaborative, multi-disciplinary environment would be ideal.

As a growing, \$3-billion healthcare innovator we can offer a competitive salary and benefits package. If qualified, please forward resume, in confidence, to: Mr. R. Blackburn, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

What you have in mind, we put in action.



Schering-Plough

WE HAVE \$7 BILLION IN SALES. WOULD YOU CARE TO MAKE IT \$8 BILLION?

SmithKline Beecham is a \$7 billion global pharmaceutical and health care company. Our world famous products and reputation mean unsurpassed opportunities for individuals to combine their scientific and marketing expertise as Regional Medical Associates.

Our Regional Medical Associates establish relationships within major medical institutions for the purpose of acting as scientific liaison and providing in-depth information regarding SmithKline Beecham products. This includes the training of representatives and medical professionals. Travel 50%.

To qualify, you must have a Ph.D. in Pharmacology, Toxicology, Microbiology or related life sciences. Strong marketing and communication skills and a high degree of initiative are also required. Opportunities currently exist in New York State, New Jersey, Kentucky and South Florida areas.

We offer one of the best compensation packages—including car—in the industry. If you'd like to be a part of our success, send your resume and salary history to Central Employment, SmithKline Beecham, 1514 Spring Garden Street Philadelphia, PA 19101. Equal Opportunity Employer, M/F/H/V.

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SmithKline Beecham
Pharmaceuticals

RepliGen Corporation is a leader in the application of Biotechnology to the health care market. We are currently developing an AIDS vaccine, AIDS therapeutic and diagnostic products, cancer therapies, and novel bioprocess reagents. We take pride in the high caliber of our scientific staff and our collaborations with major research institutions and corporate partners in Europe and the United States. The expansion of our effort has created the following opportunity:

Analytical Protein Chemist

Our protein chemistry department seeks an analytical protein chemist to supervise the physical and biological characterization of potential clinical products. Additional responsibilities will include the development of analytical procedures to support ongoing research programs. The qualified applicant will possess a Ph.D. in chemistry or biochemistry, experience with the analysis of proteins or peptides, and excellent communication skills. Postdoctoral or industrial experience is desirable but not essential.

RepliGen Corporation offers a competitive salary, excellent benefits, and equity participation. Please submit a cover letter, resume, and references to **B. Fleming, RepliGen Corporation, One Kendall Square, #122, P.O. Box 9171, Cambridge, MA 02139.**

RepliGen

An Equal Opportunity Employer

PhD PULMONARY PHARMACOLOGIST

The ICI Pharmaceuticals Group is dedicated to the challenge of discovering and developing important new therapeutic agents for the treatment of pulmonary, cardio-renal, and CNS disorders. Expansion of our research programs has resulted in the creation of a new opportunity in our Pulmonary Group at our Wilmington, DE research center.

The successful candidate will have a PhD and at least two years of post-doctoral training with emphasis on functional pharmacologic characterization of potassium channel modulators in *in vitro* and *in vivo* paradigms. Expertise with rubidium efflux techniques required. Good communication and interpersonal skills necessary for effective work in an interdisciplinary environment are essential.

We offer an excellent salary and benefits program, including relocation assistance, and the opportunity to build a career with one of the world's leading pharmaceutical research organizations.

Please send C.V., in confidence, to:

Mary K. Grigas
ICI Pharmaceuticals Group
Wilmington, DE 19897.



**Pharmaceuticals
Group**

An Equal Opportunity Employer M/F.

POSITIONS OPEN

BIOCHEMICAL ENGINEER. Research, design, and develop products such as Micro Extraction device using MicroPorous hollow fibers for extraction of theophylline from human blood serum. Write U.S. government grant proposals. Ph.D. in biochemical engineering. One year of experience doing above or 1 year of experience as research associate synthesizing flavour esters such as heptyl butyrate using enzymes such as lipase. Forty hours per week; \$36,100 per year. Job located in Wallingford, Connecticut. Send résumé to: **Job Service Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109. JO#3067285.**

BIOMATERIAL SCIENTIST

As a leader in the field of cell transplantation research, we currently have an opening for a Ph.D. scientist with experience in biomedical engineering, cell biology, physiology and/or artificial organs to work in the field of encapsulated cell transplantation. Please submit curriculum vitae to: **Department #952, Administration Department, Hana Biologics, Inc., 850 Marina Village Parkway, Alameda, CA 94501. Equal Opportunity Employer.**

CELL BIOLOGIST/IMMUNOLOGIST. University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School (UMDNJ-RWJMS), Ph.D. position open in Division of Rheumatology. Rank commensurate with experience. Start-up funds available with a competitive salary. Research activities include leukocyte-endothelium interaction, crystal-induced inflammation, and synovial membrane physiology. Also, the candidate will be encouraged to pursue his/her own interests and ultimately to apply for funding. No undergraduate teaching. Please send a statement of research interests, names of three references, and complete curriculum vitae to: **Antonio Reginato, M.D., Department of Medicine, Suite 220, UMDNJ-RWJMS, 3 Cooper Plaza, Camden, NJ 08103. Equal Opportunity Employer.**

CHAIR, MICROBIOLOGY AND IMMUNOLOGY. Temple University School of Medicine is searching for an outstanding scientist/teacher/administrator to serve as its new chairperson of microbiology and immunology. The Department of Microbiology and Immunology has a multidisciplinary teaching and research program with an excellent faculty. The chair will provide leadership in achieving continuing excellence in teaching, research, and service. The individual will be responsible for recruiting new faculty and attracting external program funding. Applications must be received by 1 June 1990. Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of four references to: **Peter R. Lynch, Ph.D., Microbiology and Immunology Search Committee, Temple University School of Medicine, Department of Physiology, 3420 North Broad Street, Philadelphia, PA 19140. Temple University is an Equal Opportunity/Affirmative Action Employer.**

THE UNIVERSITY OF MICHIGAN CHAIR DEPARTMENT OF ATMOSPHERIC, OCEANIC, AND SPACE SCIENCES

The University of Michigan in Ann Arbor, Michigan, invites applications or nominations for the position of chair of the Department of Atmospheric, Oceanic, and Space Sciences in the College of Engineering.

The teaching and research programs of the department deal with atmospheric science, physical oceanography, planetary science, and space science. There are 17 members of the academic faculty, 13 members of the research faculty, and 60 graduate students. The Space Physics Research Laboratory is a part of the department.

Applications and nominations will be entertained from candidates in any area of atmospheric, oceanic, and space science, but special consideration will be given to candidates in the area of global and mesoscale modeling of atmospheric dynamics, boundary layer modeling or air-sea interaction, and measurement of atmospheric properties or chemical modeling. The University of Michigan is about to launch a major interdisciplinary program in the area of global change and the department will play an important role in this program.

Please send résumé and five references to: **Professor James C. G. Walker, Department of Atmospheric, Oceanic, and Space Sciences, The University of Michigan, 2455 Hayward, Ann Arbor, MI 48109-2143.**

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

POSITIONS OPEN

DEAN. The University of South Alabama invites nominations and applications for the position of Dean of the College of Arts and Sciences which is to be filled by 1 September 1990. Applicants must have a distinguished academic background, an earned doctorate in a relevant discipline, and a record of successful performance as a university teacher, scholar, and administrator. Send letter of nomination and application, with a résumé attached to: **Dr. John E. Filer, Chairman, Search Committee, College of Business and Management Studies, University of South Alabama, Mobile, AL 36688.** To be considered, a letter, curriculum vitae and a list of references must be postmarked no later than 16 April 1990. *Affirmative Action/Equal Employment Opportunity.*

DIRECTOR OF CYTOGENETICS

The Department of Pathology and Laboratory Medicine at the Medical University of South Carolina is seeking a director of the cytogenetics laboratory. The candidate should be Board-eligible or -certified by the American Board of Medical Genetics. In addition to directing the full service clinical cytogenetics laboratory, the candidate will be expected to develop an independent research program and to participate in the teaching of medical and graduate students. Faculty rank and salary will be commensurate with experience. Send curriculum vitae with names of three references to: **A. Julian Garvin, M.D., Ph.D., Professor and Chairman, Department of Pathology and Laboratory Medicine, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

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FACULTY OF ATMOSPHERIC AND SPACE SCIENCES THE UNIVERSITY OF MICHIGAN DIRECTOR, SPACE PHYSICS RESEARCH LABORATORY

The University of Michigan in Ann Arbor, Michigan, is inviting applications for director of the Space Physics Research Laboratory (SPRL). The new director will be a tenured full professor in the Department of Atmospheric, Oceanic and Space Sciences.

Presently SPRL has 10 instructional and 13 research faculty members supported by a professional and administrative staff of about 50. The laboratory's faculty also supervises about 50 graduate students. The laboratory's principal present research interests span a broad range, including experimental and theoretical research in aeronomy, atmospheric chemistry, planetary environments, and space plasma physics. Applications will be entertained from candidates in any of these disciplines, but special consideration will be given to candidates in the area of experimental studies related to global change. The University of Michigan is about to launch a major interdisciplinary program in the area of global change and the new director would have the opportunity to play an important role in shaping this program. SPRL is part of the Department of Atmospheric, Oceanic and Space Sciences in the College of Engineering and SPRL members contribute to the academic programs of the department and participate heavily in graduate and undergraduate education.

Please send résumé and five references to: **Professor Thomas M. Donahue or Professor Tamas I. Gombosi, Space Physics Research Laboratory, The University of Michigan, Ann Arbor, MI 48109. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.**

SENIOR RESEARCH SCIENTIST

At the ASSOCIATE PROFESSOR level to conduct studies in the molecular genetics of Down syndrome and other genetic disorders related to developmental disabilities. This position has excellent institutional support for salary, staff, equipment, and supplies. Position carries a faculty appointment at State University of New York Health Science Center at Brooklyn. Applicants must have Ph.D. or M.D. and at least 5 years of research experience following postdoctoral training. Send curriculum vitae to: **Personnel Department, Institute for Basic Research in Developmental Disabilities, 1050 Forest Hill Road, Staten Island, NY 10314.**

POSITIONS OPEN

OFFICE OF INTERNATIONAL AFFAIRS ASSOCIATE EXECUTIVE DIRECTOR

National scientific and technological organization seeks an experienced professional in the area of international science and technology policy for position of associate executive director. Responsibilities include conceptualization and organization of policy studies on international S & T issues and assistance in the guidance and coordination of a broad range of international programs and activities. Ph.D. or equivalent in science or engineering preferred and at least 6 to 10 years of policy analysis and related management experience are essential. Foreign experience and language skills are highly desirable. We offer a salary commensurate with experience and an exceptional benefits package. Please send résumé and salary history in confidence to: **NRC/OIA, HA 450 (VR), 2101 Constitution Avenue, N.W., Washington, D.C. 20418. Equal Opportunity Employer.**

NATIONAL RESEARCH COUNCIL (NRC)

The University of Michigan, Ann Arbor, has substantially strengthened its commitment to Macromolecular Science and Engineering. We seek to fill the position of **DIRECTOR OF THE MACROMOLECULAR SCIENCE AND ENGINEERING CENTER** at the senior faculty level. The Director's academic appointment will be in a relevant department although specific discipline and departmental affiliation are not criteria in this search. The candidate must have a Ph.D., an exemplary record of original research accomplishments in the field of polymer science, the ability to provide leadership to an interdisciplinary faculty and student body, the ability to secure external funding, and the competence to teach graduate courses in polymer science. Applicants are asked to submit a résumé which includes a summary of past and proposed research and a list of publications. Send application materials to: **Professor Frank E. Filisko, Acting Director, Macromolecular Science and Engineering Center, The University of Michigan, 2200 Bonisteel Boulevard, Ann Arbor, MI 48109-2099. The University of Michigan is a nondiscriminatory, Affirmative Action Employer.**

PROGRAM DIRECTOR IN BIOLOGY

The Department of Biology at Emory University seeks a person to head a program of new undergraduate initiatives funded by the Howard Hughes Medical Institute, to begin on or before 1 September 1990. The initiatives include faculty and curriculum development, a summer program for entering minority students interested in biology, and new advanced laboratory courses. The candidate should have a Ph.D., a strong background in biology, knowledge of current research and practice in undergraduate science education, and experience in instruction and faculty development. The position is a 12-month appointment for a period of at least 5 years; salary is commensurate with qualifications and experience. Send curriculum vitae, a statement of your interests and experience in teaching and science education, and have three letters of recommendation sent to: **Dr. Gray F. Crouse, Chairman, Department of Biology, Emory University, Atlanta, GA 30322.** Review of applications will begin immediately, and the position will remain open until filled. *Emory is an Equal Opportunity/Affirmative Action Employer.*

THE SCHOOL FOR FIELD STUDIES


FIELD DIRECTOR: Center for Marine Biology Studies, Caribbean. Lead faculty and 30 undergraduates in summer, semester programs in tropical marine ecology. Qualifications: administration; diving; small boats; research; teaching in marine biology, resource management, or cultural ecology. Advanced degree. Familiarity with the region and experimental education. Start May.

MARINE MAMMALOGISTS (TWO): Baja, Mexico. Teach marine ecology, marine mammal biology, undergraduate research in semester programs. Experience: Marine mammals, preferably in Baja, experiential teaching, field-work, Spanish a plus. Nine-month position. Year option. Start August.

RESOURCE MANAGEMENT: Australia. Teach semester (summer option) rain forest management course. Qualifications: excellent teaching and research. Advanced degree in planning, forestry, other. Start August.

Send letter, résumé, references with telephone numbers to: **S-Search, School for Field Studies, 16 Broadway, Beverly, MA 01915.**

Research Opportunities in Japan



Promising new researchers may win fellowships for visits to Japan of six months to two years. The fellowships, which support both American and Canadian researchers at Japan's national laboratories and certain non-profit R&D institutes, are provided by the Research Development Corporation of Japan (JRDC).

To qualify, researchers should hold a recent doctoral degree in a field of science or engineering. In the fields of engineering, candidates without the doctorate will be considered if they can demonstrate equivalent professional experience.

The STA fellowships provide the following allowances (in Japanese yen):

Round-trip air transportation	ticket
International relocation allowance	¥200,000
Monthly living allowance	270,000
Monthly housing allowance up to	100,000
Monthly family allowance	50,000
Annual travel allowance in Japan	100,000

In all, more than 100 Japanese government research institutions are potential hosts for STA postdoctoral fellows. They include such well known laboratories as the Institute of Physical and Chemical Research (RIKEN), Electrotechnical Laboratory, National Institute for Environmental Studies, National Institute of Health, Mechanical Engineering Laboratory, National Institute of Agrobiological Resources, Communications Research Laboratory, and the National Research Institute for Metals.

Potential candidates are responsible for finding the Japanese research institute which will best match their field of professional interest. Each applicant should begin correspondence with his or her prospective Japanese host well before submitting a proposal.

In the United States

To obtain an application, United States citizens, nationals, or permanent residents should request NSF publication 88-52, *Science and Technology Agency of Japan Postdoctoral Awards for U.S. Researchers*, from the following address:

Forms and Publications Unit, Room 232
National Science Foundation
Washington, D.C. 20550

Publications may also be ordered electronically through either BitNet (pubs@NSF) or Internet (pubs@note.nsf.gov). Please include the NSF publication number and title, number of copies needed, your name, and a complete mailing address.

The NSF application deadline is November 1, 1990, for positions starting in April 1991 or after. In addition, there are opportunities for individuals wishing to start sooner. Further information is available from the following address:

Japan Programs, Room 1214
National Science Foundation
Washington, D.C. 20550

or, by electronic mail: NSFJinfo@NSF (BitNet) or
NSFJinfo@note.nsf.gov (Internet)

In Canada

For further information, Canadian candidates may contact the following:

Ms. Dawn Conway
Director, International Programs
Natural Sciences and Engineering Research
Council of Canada
200 Kent Street
Ottawa, Ontario
K1A 1H5
Canada

Tel: (613) 992-9169
Fax: (613) 992-5337

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RESEARCH CENTRE OF PIERRE FABRE

has an immediate opening for a

BIOPHYSICIST

with an additional proficiency in BIOENGINEERING and an interest in the BIOMECHANICAL PROPERTIES of the SKIN.

Specific responsibilities include creating the **DEPARTMENT OF FUNDAMENTAL BIOENGINEERING**, perfecting new techniques and developing new applications of existing ones.

Familiarity with COMPUTERS and MICROMECHANICS will be a plus.

The successful candidate will work in relation with the scientists of our Research Centre as well as with the Departments of Dermatology of TOULOUSE Hospitals where the position is located.

Please send resume, hand written application letter to:

PIERRE FABRE S.A. - Direction des Ressources Humaines - D 239/S - 1, avenue d'Albi - B.P. 222 - 81106 CASTRES CEDEX - FRANCE.

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Patent Examiners



You could play a vital role in the advancement of microbiology as a Patent Examiner at the U.S. Patent and Trademark Office. You'll continue a 200-year old tradition of fostering American innovation by evaluating patent applications involving recombinant DNA, molecular and cellular immunology, molecular genetics, microorganisms, cell biology, cell culture, fermentation, enzymology and clinical chemistry.

This challenge requires a minimum of a four-year degree in Molecular Biology, Biochemistry, Immunology, Enzymology, Embryology, Protein Chemistry, Microbiology or Cell Biology.

A PhD or MS degree with relevant research experience preferred. A BS degree with significant research experience will be considered. These research areas would be beneficial: DNA cloning, protein chemis-

try, gene expression, sequencing techniques, muteins, hybridoma technologies, monoclonal antibody applications, mammalian or plant cell lines, cell culture, immunossays, hybridization techniques, fermentation, enzymatic reaction, diagnostics, and automation of clinical analysis.

We offer a salary commensurate with experience, complete benefits and an excellent location in Arlington, VA. Contact the Patent & Trademark Office, Office of Personnel, One Crystal Park, Suite 700, Washington, D.C. 20231. Or call toll-free: 800-368-3064 or (703) 557-3631 in the Washington, D.C. area. An equal opportunity employer.



POSITIONS OPEN

CANCER CENTER DIRECTOR

The University of California, San Diego (UCSD), seeks a director for the UCSD Cancer Center, an NCI-designated facility which is also a formal interdepartmental Organized Research Unit of UCSD. The activities of the Cancer Center include research, clinical treatment, and service to the university and public.

Applicants should have distinguished record in research and service and should have ability to administer effective interdisciplinary programs in science and clinical care.

Candidates should be eligible for appointment at the full professor level at UCSD with the specific department for appointment depending upon the particular interests of the candidate. Salary will depend upon qualifications of the candidate and will be consistent with established UCSD pay scales.

Interested individuals should submit curriculum vitae and names of six references by 30 April 1990 to:

David N. Bailey, M.D.
Chair/Cancer Center Search Committee
Professor and Chairman
Department of Pathology
UCSD School of Medicine, M-012
La Jolla, CA 92093

UCSD is an Equal Opportunity/Affirmative Action Employer.

ECOLOGIST AND COMPUTER SPECIALIST.

The Platte River Whooping Crane Trust, an endowed nonprofit trust that manages 8000 acres of migratory bird habitat, seeks an aquatic ecologist/computer specialist to conduct riverine and wetland studies, assist staff with data collection and analysis, and develop and modify ecologic and hydrologic models. Advanced degree, experience with IBM-PC's, statistics, IFIM, GIS, FORTRAN. Preference for hydrology, invertebrate, or fisheries background. Send cover letter, résumé, and reprints to: **PRT, 2550 North Diers Avenue, Suite H, Grand Island, NE 68803. Telephone: 308-384-4633.**

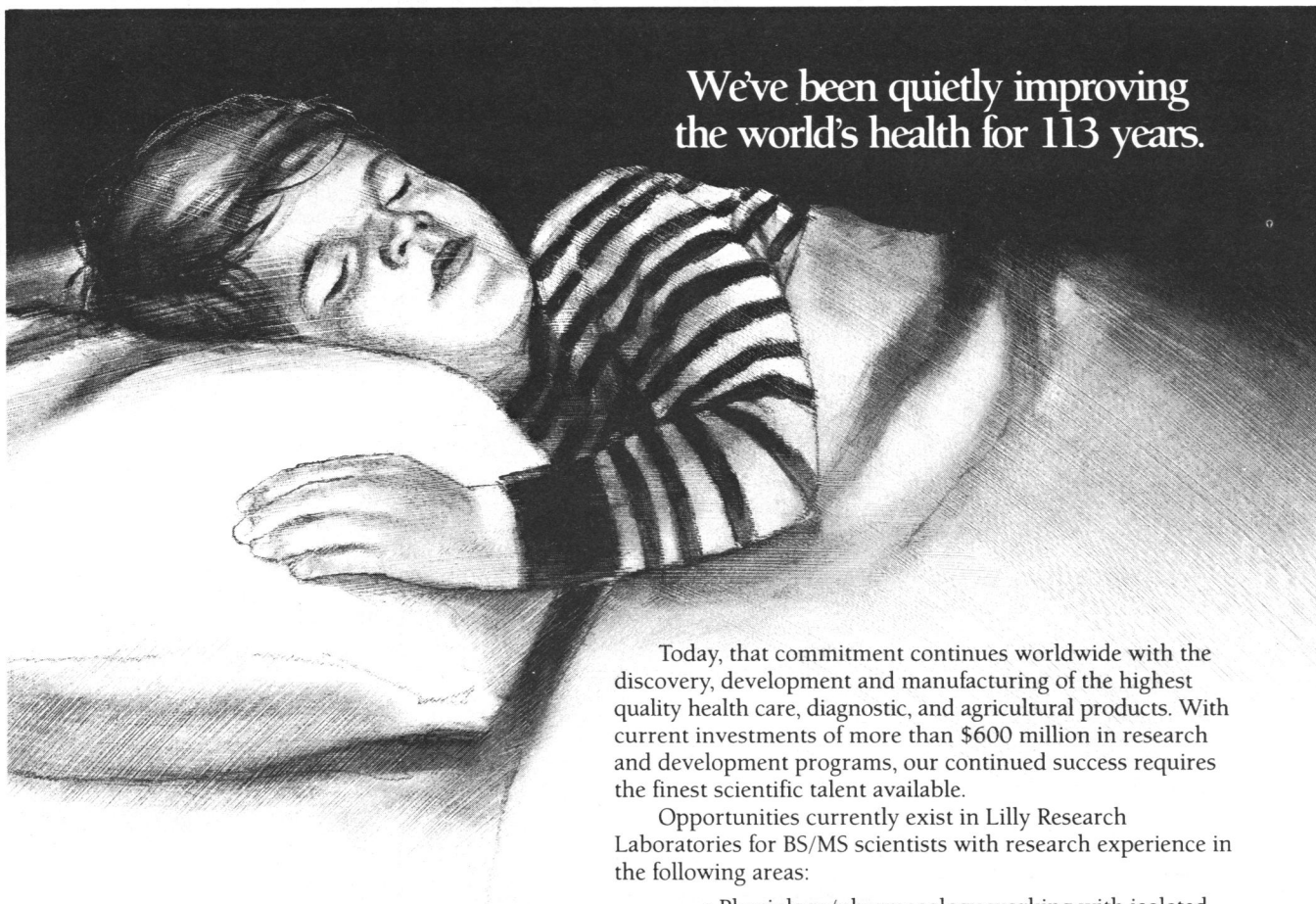
Experienced **ELECTROPHYSIOLOGIST** needed to join our multidisciplinary team studying hippocampal function. The candidate should be highly experienced in extracellular single unit and field potential recording, iontophoresis, and recording from ion-sensitive electrodes. The candidate should also have experience with intracellular recording, light and electron microscopy, and NMDA receptor pharmacology. To be competitive for this position, the candidate should have at least 5 years of postdoctoral experience. The position is available immediately for 3 years at about \$30,000 per year. Send curriculum vitae and names of three references to: **Dr. William B. Levy, Department of Neurosurgery/IV, Box 420, University of Virginia Health Sciences Center, Charlottesville, VA 22908. Equal Opportunity/Affirmative Action Employer.**

LYMPHOBLAST CULTURE FACILITY COORDINATOR

An M.S. or Ph.D. with experience in lymphoblast transformation and cell culture to supervise a Core Laboratory in the Center for Medical Genetics at The Johns Hopkins Hospital. Candidates should have knowledge of quality control and contamination testing and the ability to direct laboratory personnel. Send résumé to: **Louis H. Cote, School of Medicine, The Johns Hopkins University, P.O. Box 2454, Baltimore, MD 21203-2454. Telephone: 301-955-2989. Equal Opportunity Employer, M/F/H.**

TERM FACULTY POSITION. The Department of Biological Sciences, University of Alaska Anchorage (UAA), invites applications for a 9-month nontenure-track faculty position for academic year 1990-91, beginning 15 August 1990, to replace faculty on sabbatical leave. Annual teaching responsibilities include genetics, cell biology, and molecular biology. Workload equals 80% teaching, 20% service. Completed Ph.D. and prior teaching experience required. Rank open. Send curriculum vitae and list of three references by 30 April 1990 to: **Personnel Services, University of Alaska Anchorage, 3890 University Lake Drive, Anchorage, AK 99508.** Drs. Kudenov and Dimino will attend FASEB meetings in April for further clarification of the position.

Must be eligible for employment under the Immigration Reform and Control Act of 1986. UAA is an Affirmative Action/Equal Opportunity Employer and Educational Institution.



We've been quietly improving
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Today, that commitment continues worldwide with the discovery, development and manufacturing of the highest quality health care, diagnostic, and agricultural products. With current investments of more than \$600 million in research and development programs, our continued success requires the finest scientific talent available.

Opportunities currently exist in Lilly Research Laboratories for BS/MS scientists with research experience in the following areas:

- Physiology/pharmacology working with isolated tissues, biochemical assays, and/or "in vivo" models monitoring various pulmonary or cardiovascular parameters.
- Biochemistry/biotechnology using state-of-the-art hybridoma technology, procedures for the purification and characterization of proteins/glycoproteins, recombinant DNA technology and immunochemical techniques.
- Bone biology/cell biology using biochemical, immunological and cell culture techniques to develop "in vitro" assays for use in studies of bone formation and resorption.

We are seeking candidates with BS/MS degrees in biology, biochemistry, cell biology, immunology, pharmacology, physiology or related disciplines. Excellent verbal and written communication skills are essential.

In addition to attractive salaries and benefits, Lilly provides excellent programs for continued growth including ongoing training through in-house seminars and off-site programs. We also provide financial assistance for job-related advanced degrees and coursework.

If you have a personal commitment to the future of global health care, bring your talents to Lilly. Please send your resume, with indication of your area of interest, to:

Ms. Ann Hinson (SHE)
Corporate Recruiting
Eli Lilly and Company
Lilly Corporate Center
Indianapolis, Indiana 46285



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Eli Lilly and Company is an equal opportunity employer.



Microbiologist

The Research and Development Department of Texaco has an immediate opening for a Ph.D. Microbiologist in our Biotechnology Group in Beacon, New York.

The preferred candidate will be a creative, independent researcher with a strong background in microbial ecology and physiology. The successful candidate will be involved in isolating and enriching for microorganisms, developing bench scale demonstrations of biodegradation, and working as a technical consultant for our operating departments.

Good communication skills and a willingness to work along with other scientists to accomplish common objectives are essential. Qualified individuals should send their resumes in confidence to:

**Human Resources Department
Texaco Inc.
P.O. Box 509
Beacon, NY 12508**

An Equal Opportunity/Affirmative Action Employer. Applicants who are not legally authorized to work in the United States need not apply.

ECOLOGISTS

Argonne National Laboratory, located in the western suburbs of Chicago, Illinois, has openings for a Plant Ecologist and a Systems Ecologist. Applicants should have a strong analytical background, with experience in ecological modeling and/or statistics. The positions require plant community and ecosystem analyses that quantify the effects of human disturbance on natural systems. Areas of interest include global change, cumulative analysis, ecotoxicology, ecosystem restoration and rehabilitation, and landscape ecology, but all qualified applicants will be considered. Active research projects, with emphasis on publishing studies in the open literature, are expected.

Both positions require a Ph.D., with postdoctoral experience preferred.

Argonne National Laboratory offers an excellent salary commensurate with background and experience, as well as a comprehensive benefits plan. For prompt consideration, send a detailed resume to: **Nancy L. Gripatis, Box J-EID-39643/39644-55, Employment and Placement, ARGONNE NATIONAL LABORATORY, 9700 South Cass Avenue, Argonne, IL 60439.** Argonne is an equal opportunity/affirmative action employer.



POSTDOCTORAL FELLOW

Positions available at the National Institute on Alcohol Abuse and Alcoholism to study: 1) regulation of receptor-coupled G-protein function and/or biochemistry of receptor-gated ion channels in brain and neural cell cultures and the effect of ethanol on these systems; 2) molecular mechanisms of neuropeptide (vasopressin) action in brain and role of peptides in neuroadaptation. Candidates should have research experience in biochemistry and/or pharmacology, as well as some molecular biology (required). Salary is commensurate with training and experience. Send CV and three letters of recommendation to:

**Dr. P. Hoffman
NIH/NIAAA
Building 10, Room 3C103
9000 Rockville Pike
Bethesda, MD 20892**



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TAKING IMAGINATION ONE STEP FURTHER.

Life Technologies, Inc. is one of the most prominent names in life sciences research, industrial bioproducts and biotechnology. LTI supplies more than 2,000 products world-wide including GIBCO BRL Research Products and Molecular Diagnostics Products. Recent breakthroughs in the development of products for DNA analysis, forensics, and genomics and in the advancement of bioprocessing technology for industrial scale bioproduction has positioned LTI as a rising global leader in new product development. To further our inroads into the future, we offer the following opportunities to qualified professionals.

We are seeking individuals with a BS, MS, & Ph.D. degrees in the following SCIENTIFIC AREAS:

- BIOCHEMISTRY
- CELL BIOLOGY
- ENZYMOLOGY
- IMMUNOLOGY
- MICROBIOLOGY
- MOLECULAR BIOLOGY
- PRODUCTION
- QA/QC

We also have the following career opportunities available in the following areas:

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LTI offers an excellent salary, opportunities for career advancement, and an impressive roster of benefits. Please forward your resume or C.V. with salary requirements indicating position of interest to:

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Employment Manager
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Gaithersburg, MD 20877
(301) 840-5974 (fax)**

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The Genetics & IVF Institute is an established leader in the development and provision of genetic and infertility laboratory services. Positions are now available for qualified, dynamic individuals.

IDENTITY TESTING UNIT HEAD

Requires Ph.D. in molecular biology with interest or experience in paternity testing or forensic DNA applications.

CANCER GENETICS UNIT HEAD

Requires Ph.D. in molecular genetics, cytogenetics, or related field with experience in molecular oncology.

The Institute provides a stimulating environment in which leadership, innovation, and research are encouraged. We offer competitive salaries, a comprehensive benefits package, and a fine location in the Washington D.C. area. For confidential consideration please forward your resume or C.V. to: **Genetics & IVF Institute, Personnel Department, 3020 Javier Road, Fairfax, VA 22031.**



Genetics & IVF Institute

The Squibb Institute for Medical Research

The Squibb Institute for Medical Research is continuing to expand our extensive research efforts in the areas of cardiovascular, infectious, oncologic and metabolic diseases.

This expansion has created several exceptional opportunities for creative research professionals.

Research Investigators, Ph.D.

BACTERIAL GENETICS

Conduct research on the heterologous bacterial expression in cells of genes for receptors and other therapeutic targets.

VIROLOGY

Build a dynamic research team which will establish basic projects to define novel antiviral approaches, with emphasis on defining potential antiviral chemotherapy targets for influenza viruses.

CELL BIOLOGY

Conduct studies of the regulation of lipid and lipoprotein metabolism in the following areas:

- Investigate the regulation of gene expression at both the transcriptional and translational levels, including research into the coordinate regulation of multigene metabolic pathways utilizing molecular biological techniques and homologous recombination in murine embryonic stem cells.
- Investigate the intracellular synthesis of proteins, and their processing, with emphasis on understanding the mechanism and regulation of the assembly of lipoprotein complexes in the endoplasmic reticulum, and the intracellular transport and secretion of these complexes.

DRUG METABOLISM

- Design and perform studies of metabolism and disposition of investigational compounds in animals and or man. Develop and conduct assays for radiolabeled drugs/metabolites in biological matrices utilizing modern analytical instruments and radioenzymatic and receptor assays.

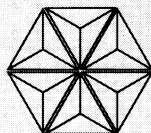
PHARMACOLOGY

Conduct research on cardiovascular diseases in the following areas:

- Evaluate and develop agents for myocardial ischemia utilizing approaches such as facilitating or depressing activity of various cellular organelles, enzymes, transport systems and ion channels.
- Conduct research related to cell proliferation utilizing protein purification, growth factors and/or mitogenic peptides.
- Conduct research for the identification and labeling of proteins and monoclonal antibodies utilizing animal models directed towards cancer therapy and diagnostics.

***Please forward your resume to: The Squibb Institute for Medical Research, Human Resources
Department 108, P.O. Box 4000, Princeton, NJ
08543-4000. An equal opportunity employer.***

Candidates for these positions should possess a Ph.D. and a minimum of 2 years' postdoctoral experience.



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POSITIONS OPEN

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, ontogenetic 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.

UNIVERSITY OF IOWA COLLEGE OF MEDICINE DEPARTMENT OF NEUROLOGY PET RESEARCH IN COGNITIVE NEUROSCIENCE

There is a tenure-track **FACULTY POSITION** open for an investigator with an established record of research in cognitive neuroscience utilizing positron emission tomography. This is an opportunity to join a leading center for the investigation of neural substrates of cognition, and take advantage of unusual integrated facilities and expertise.

Contact: **Antonio R. Damasio, M.D., Ph.D., Professor and Head, Department of Neurology, University of Iowa, Iowa City, IA 52242.** The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

FACULTY POSITIONS at Georgia Institute of Technology. The School of Earth and Atmospheric Sciences seeks applicants in atmospheric chemistry, atmospheric dynamics, geochemistry, geophysics, and meteorology for two tenure-track faculty positions. Three additional positions in these areas will be filled in the next 2 years. These positions require a Ph.D. and exceptional promise in research and teaching at the graduate and undergraduate levels. Application materials, including curriculum vitae, publications list, brief statement of research plans and teaching interests, and the names of three references should be sent to: **Search Committee Chair, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, GA 30332.** Georgia Institute of Technology (a unit of the University System of Georgia) is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN PATHOLOGY UNIVERSITY OF VIRGINIA HEALTH SCIENCES CENTER

The Department of Pathology is seeking an M.D. or M.D./Ph.D. Board-eligible or -certified pathologist with a major interest in experimental pathology. This is a tenure-track position at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The position will include duties in some aspect of anatomic or clinical pathology, but preference will be given to candidates with strong research potential who can establish an independent, externally funded research program.

Applicants should submit curriculum vitae, statement of research interests, and names of three references to: **Dr. T. W. Tillack, Chairman, Department of Pathology, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION. The Department of Pharmacology, Creighton University School of Medicine, invites applicants for a tenure-track position at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. Applicants should have a Ph.D. in pharmacology and 2 years of postdoctoral experience, as well as a commitment to research and an interest in teaching professional students and graduate students. Current research interests in the department include pharmacology of secretion, the central nervous system, smooth muscle, adrenergic receptors and peptides, as well as renal pharmacology and mediators of inflammation. We seek individuals interested in receptor mechanisms, membrane transport, intracellular mediators, or cytopharmacology in these areas; however, all qualified individuals are encouraged to apply. Interested individuals should send an outline of future research plans, curriculum vitae, and three letters of reference to: **Dr. Frank Dowd, Chairman, Department of Pharmacology, Creighton University, Omaha, NE 68178.** Creighton University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS BIOCHEMISTRY

Applications are invited for two tenure-track positions at the **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** level in the Department of Biochemistry, Université de Montréal. Candidates are expected to develop a vigorous and innovative research program in the general fields of molecular biology or structure/function of proteins. The department has excellent research facilities and strong ongoing programs in cell and molecular biology. The candidates should be prepared to teach in French within a year of their appointment. Potential candidates should submit curriculum vitae, research plans, and the names, addresses, and telephone numbers of three references before 30 April 1990 to: **Dr. Guy Boileau, Chairman, Search Committee, Department of Biochemistry, Université de Montréal, P.O. Box 6128, Station A, Montréal (Québec), Canada, H3C 3J7.** In accordance with Canadian immigration regulations, priority will be given to Canadian citizens and permanent residents (0112).

UNIVERSITY OF HONG KONG LECTURER IN ZOOLOGY

Applications are invited for a lectureship in the Department of Zoology. Preference will be given to applicants specializing in any area of experimental zoology, developmental biology, or fish biology. The appointee will be expected to share in the teaching of the general area of zoology as well as developing courses in his/her specialty.

Annual salary (superannuable) is on an 11-point scale: HK\$233,700 to HK\$390,600 (approximately U.S.\$1 = HK\$7.80 as of 23 February 1990). Starting salary will depend on qualifications and experience. At current rates, salaries tax will not exceed 15% of gross income. Children's education allowances, leave, and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7½% of salary.

Further particulars and application forms may be obtained from: **Appointments (37590), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK, or from: Appointments Unit, Registry, University of Hong Kong, Hong Kong. FAX: 852-8582549.** Closes 30 April 1990.

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 considered for consideration.

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION PROKARYOTIC GENETICS MOLECULAR PATHOGENESIS

The Department of Microbiology, University of Alabama at Birmingham, invites applications for tenure-track positions at the rank of assistant and associate professor. The applicants will need to be highly qualified in microbial genetics and molecular biology, have a funded research program in the area of microbial pathogenesis, be active in the training of Ph.D. candidates, and be an effective teacher for medical, dental, and Ph.D. students. Send curriculum vitae, names of three references, and statement of research interests to: **David E. Briles, Chairman Search Committee, 801 SDB, Department of Microbiology, University of Alabama at Birmingham, Birmingham, AL 35294.** The closing date for applications is 1 June 1990. The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

IMMUNOLOGY STAFF POSITIONS. The Division of Immunology of the Department of Pathology at New York University School of Medicine is accepting applications for tenure-track positions at the assistant professor level, with a possible initial appointment for 5 years and research support. The division's new laboratory facilities will permit the expansion of the existing strong research base of the department. Candidates with interest in antigen-processing, T-cell recognition mechanisms, and thymic functions are encouraged to apply. Candidates must hold an M.D. or Ph.D. degree and have had at least 2 years of postdoctoral experience. Applicants should submit curriculum vitae, statement of research interests, and names of three references to: **Victor Nussenzweig, M.D., Head, Division of Immunology, New York University Medical Center, 550 First Avenue, New York, NY 10016.**

MOLECULAR BIOLOGIST, ASSISTANT PROFESSOR. The Biology Department at Winona State University invites applications for a tenure-track position in the area of molecular biology. Ph.D. in one of the biological sciences is required. Responsibilities include teaching molecular biology, introductory biology for majors, a general education offering, and other courses in addition to developing a vigorous research program which involves undergraduate students. Rank and salary are dependent on qualifications and experience. Current salaries for assistant professors range from \$24,351 to \$43,852. Applicants should send a letter of application, curriculum vitae, statement of teaching interests, statement of research interests, and three letters of recommendation to: **Molecular Biology Search, Human Resources, Winona State University, Winona, MN 55987.** Consideration of applications will begin on 15 April 1990. Minorities and women are especially encouraged to apply. Affirmative Action/Equal Opportunity Employer.

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.

LIFE SCIENCES OPPORTUNITIES

EXPLORE SPACE FRONTIERS

KRUG INTERNATIONAL Tomorrow's Technology...TODAY!

KRUG INTERNATIONAL, the NASA Biomedical Operations and Research Laboratories contractor at Johnson Space Center, seeks outstanding applicants for the following **LIFE SCIENCES AND ENGINEERING OPPORTUNITIES**. Work on current Space Flight Missions, advanced program applications for future exploration, Space Station Freedom (SSF) and colonization of space. All positions are based at the NASA Biomedical Operations and Research Laboratories, and require excellent written and oral communication skills.

TOXICOLOGIST

Perform risk assessments for spacecraft and conduct toxicological research relevant to the manned space program. Requires Ph.D. or equivalent with specialization and research experience in Biochemical Toxicology. (Position T04-05)

ANALYTICAL CHEMISTS (2 Positions)

Support development of air monitoring instrumentation for spacecraft by modifying and testing hardware. Requires Ph.D. in Chemistry or related discipline, and a minimum of 2 years experience with GC/MS and/or AA instrumentation development, modification, or research. (Position T04-06)

Monitor contracts for the construction of flight hardware that will monitor air quality aboard SSF. Requires B.S. or M.S. in Chemistry or equivalent with a minimum of 3 years experience in electrochemical, GC/MS, and/or photoionization instrumentation. Experience with portable field screening instruments is desirable. (Position T04-08)

INDUSTRIAL HYGIENIST

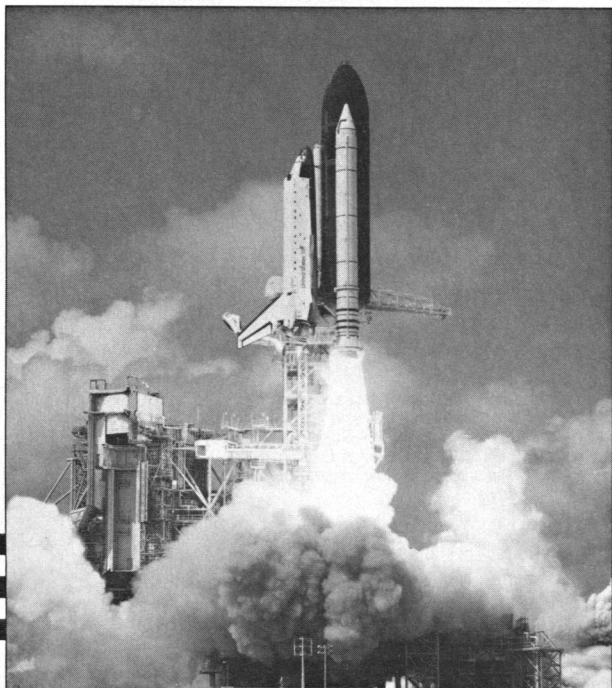
Monitor contracts for construction of spacecraft air monitoring equipment. Requires B.S., M.S. or equivalent in Industrial Hygiene or Environmental Science, plus a minimum of 2 years experience in indoor air or industrial personnel monitoring programs. (Position T04-09)

ELECTRONICS ENGINEER

Support development of air monitoring instrumentation for spacecraft by modifying and testing hardware, possibly including computer interfacing and/or electronics redesign. Requires M.S. in EE or related discipline, plus minimum of 2 years experience in Chemical Instrumentation or equivalent. (Position T04-10)

ENVIRONMENTAL MICROBIOLOGIST

Develop and/or evaluate novel microbiological techniques in monitoring strategies for use on board SSF. Requires graduate degree (Ph.D. preferred) in Microbiology or Bacteriology with emphasis in Environmental Microbiology, plus several years experience in isolation and identification of microorganisms. (Position T04-12)



COMPUTER MODELERS (2 Positions)

Develop computer models of air flow, airborne contaminant distribution, and contaminant remediation in SSF. Requires graduate degree in Computer Science, Environmental Engineering or equivalent with a minimum of 3 years experience in computer modeling of dynamic systems. (Position T04-17)

Develop computer models of SSF Water Recovery System. Graduate degree in Environmental Engineering or related field with several years experience in computer modeling of physical/chemical water treatment processes are required. (Position T04-18)

WATER QUALITY ENGINEERS (2 Positions)

Provide technical support for developing SSF personal hygiene systems. Requires B.S./M.S. in Environmental Engineering or related field with several years experience with physical/chemical water treatment processes. (Position T04-19)

Provide engineering support for disinfection systems for the SSF Water Recovery System. Requires B.S./M.S. in Environmental or Chemical Engineering with experience in physical/chemical treatment processes. (Position T04-20)

ANALYTICAL WATER CHEMIST

Conduct water sample analysis and instrumentation development for water quality assessment aboard SSF. Requires B.S./M.S. in Chemistry or Environmental Science with several years experience in chemical instrumentation. (Position T04-21)

RADIATION HEALTH EFFECTS SCIENTIST

Integrate environmental health requirements with current research and technology to ascertain health risks of long-duration space missions. Ph.D. in Biophysics, Radiation Biology or related discipline and a research background in radiation health effects are required. (Position T04-22)

BIOTECHNOLOGY LABORATORY SUPERVISOR

Search Reopened

The successful applicant will direct and supervise the operations of the Biotechnology Laboratory, which consists of Cell Science, Engineering, and Biotechnology Facility sections. Requirements include an earned Ph.D., in Cell Biology or a related field with expertise in engineering, or a Biomedical Engineer with an extensive background in Cell Biology. The position also requires knowledge of mammalian tissue culture techniques, mammalian cell physiology, and familiarity with modern molecular biology of mammalian systems. Supervisory experience is a must. A knowledge and understanding of NASA documentation for flight hardware and experience with the design review process will be helpful. (Position I01-01)

ENDOCRINOLOGIST/PHYSIOLOGIST

Investigate hormonal/biochemical mechanisms of acute and chronic blood volume changes and correlate such changes with physiological parameters in ground-based and in space flight research. Requires Ph.D. in Endocrinology/Physiology with research experience in fluid and electrolyte regulation. (Position J09-04)

To receive full consideration for these positions, Applications must be received by April 16, 1990. Additional Life Sciences and Engineering positions are available with KRUG International. **INTERESTED APPLICANTS** should send a letter of application stating position number of interest, a current c.v., a statement of salary history, and a list of references (including phone numbers) to:

June E. Richmond, Human Resources Manager
KRUG International
Technology Life Sciences Division
P.O. Box 58827
Houston, TX 77258
Fax: (713) 488-8503

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Employment Eligibility Verification Required.

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INTERNATIONAL

Technology Life Sciences Division

MOLECULAR BIOLOGIST

The Research Division of Rohm and Haas Company, a specialty chemicals manufacturer with global operations, has a challenging opening in its Corporate Biotechnology Research Group for a scientist interested in utilizing recombinant DNA methodology for protein structure/function analysis and protein engineering. The position is located at our Corporate Research Center in Spring House, PA — twenty miles north of center-city Philadelphia.

Candidates must have an MS or BS degree in molecular biology, biochemistry, microbiology, or a related discipline. You should also have experience in: cloning strategies, library screening, subcloning, DNA sequencing, automated synthesis and purification of oligonucleotides, and purification of recombinant DNA. Above all, you must be a scientist who can apply the perspectives and methodology of molecular biology to new research opportunities.

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

Corporate Staffing #990



An Equal Opportunity Employer M/F.

DIRECTOR, DIVISION OF ENDOCRINOLOGY

The Department of Internal Medicine of St. Louis University School of Medicine invites applications and nominations for the position of Director of its Division of Endocrinology. We seek a physician-scientist with a substantial publication record and a history of peer-reviewed grant support. The Director will be responsible for developing a large, academically oriented Division. Generous research space and financial support will be provided.

Please forward nominations and applications to Coy D. Fitch, M.D., Drefs Professor and Chairman, Department of Internal Medicine, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104. Equal Opportunity Employer M/F/H/V.



**St. Louis University
School of Medicine**



**ATTENTION: Graduate Students, Doctoral
Candidates, and recent college graduates!**

SPEND A YEAR OF SCIENCE & RESEARCH IN ISRAEL

AT THE HEBREW UNIVERSITY OF JERUSALEM

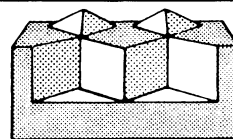
The Institute of Life Sciences at the Hebrew University of Jerusalem offers laboratory and field research internships for English speaking students in the following areas:

**Biological Chemistry
Botany Developmental Biology
Ecology
Genetics
Neurobiology and
Zoology**

A number of merit and need-based scholarships for the 1990-91 academic year have been made available through the generosity of the Horace W. Goldsmith Foundation, the American Friends of the Hebrew University, and other organizations.

For application and further information about fees and financial aid opportunities call or write:

**Joel Bauman
Coordinator of Graduate Programs
Office of Academic Affairs
Hebrew University
11 East 69th Street
New York, NY 10021
(212) 472-2288**



The Mount Sinai Medical Center of New York

Professor and Chairperson Department of Neurology

The Mount Sinai School of Medicine of the City University of New York invites applications and nominations for the position of Chairperson of the Department of Neurology.

The internationally recognized candidate will assume responsibility for directing a major clinical department providing neurology services at Mount Sinai Hospital as well as its three large affiliated hospitals. The Department is actively involved in undergraduate and graduate medical education and has an extensive basic and clinical research program.

Candidates must have preeminent academic credentials, demonstrated excellence in clinical care, research and education, and have proven administrative and leadership skills.

Please forward applications and nominations to: Daniel P. Perl, M.D., Chairman, Neurology Search Committee, The Mount Sinai Medical Center, Box 1134, One Gustave L. Levy Place, New York, NY 10029-6574. Mount Sinai is an affirmative action/equal opportunity employer and strongly encourages applications from women and minority candidates.

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FOOD SCIENTISTS

Haarmann & Reimer Corporation has immediate opportunities for creative and innovative research scientists in its rapidly expanding biotechnology Food Ingredients Division.

DIRECTOR OF NEW TECHNOLOGY

The ideal candidate will have a Ph.D. in biochemistry, microbiology or related field; MBA is desirable. 10-15 years R & D experience in foods or food ingredients is essential. Must have a broad knowledge of the industries and the ability to identify and recognize technical opportunities and commercial potential of new technologies.

SENIOR STAFF SCIENTIST

The ideal candidate should have a Ph.D. in Microbiology and will have had 5-10 years post-doctoral experience in the conception, development and implementation of microbiological processes including strain development as applied to the foods and/or food ingredients industry.

RESEARCH SCIENTISTS AND SENIOR RESEARCH SCIENTISTS

Several positions exist for scientists with a Ph.D. in microbiology, biochemistry or food science. Candidates should have 3-10 years industrial experience in the development and/or application of food ingredients to food systems. Knowledge of the interaction of novel additives with food components and their structure/function relationships in food composition is desirable.

All individuals should possess excellent communication, problem solving and team building skills and the ability to interact in a multi-discipline environment.

Located in Elkhart, Indiana, we offer an excellent salary and benefits program.

Please send your resume in confidence to:

Mr. Norman F. Heminger
Director, Personnel
Dept. 338



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P.O. Box 932
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AN EQUAL OPPORTUNITY EMPLOYER M/F/H

For more than a century the employees of Burroughs Wellcome Co. have applied their talents to the discovery and development of important new medicines. Their abilities and initiative have brought our company preeminence in both the pharmaceutical industry and the scientific world...as our recent Nobel winners give eloquent testimony.



GREAT PEOPLE MAKE A GREAT COMPANY

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An opportunity exists at Burroughs Wellcome Co. for a Ph.D. with postdoctoral experience to apply patch clamp electrophysiological procedures to the study and discovery of novel CNS drugs. This individual will contribute studies of ion channels to the operation of an interdisciplinary team of neuroscientists engaged in new drug discovery. The opportunity also exists for this individual to conduct independent research and play a key role in leading drug discovery efforts.

Candidates must have a Ph.D. in physiology or pharmacology with one year postdoctoral experience in electrophysiology, OR a Master's degree in physiology or pharmacology with four years experience in electrophysiology, OR a Bachelor's degree in a biological or chemical science with six years experience in electrophysiology. Experience in use of single channel recording techniques to study effects of therapeutic agents on ion channels is required.

As a valued professional at Burroughs Wellcome Co. you will receive a salary commensurate with your experience and be supported by the highest level of benefits in our industry. If you are interested in working for us, submit your resume, indicating position number in your cover letter, by **May 21, 1990** to: **Burroughs Wellcome Co., Recruiting and Staffing, Position # 3015-4, 3030 Cornwallis Rd., Research Triangle Park, NC 27709.**

For information on job opportunities with Burroughs Wellcome Co., call our Job Information Line at **(919) 248-8347** in Research Triangle Park, NC or **(919) 830-2997** in Greenville, NC.



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Research Scientists

Triton Biosciences Inc., an emerging pharmaceutical and diagnostics company, is focused on product development opportunities in the areas of cancer, AIDS and other serious diseases. We currently have the following positions available in our San Francisco Bay Area facility.

MOLECULAR BIOLOGY

Perform cDNA cloning and work with mammalian gene expression systems and expression cloning. Requires a PhD in Molecular/Cell biology. Prefer a background in oncogenes with 3-5 years' industry experience. Refer to Job #90-021.

CELL BIOLOGY

Coordinate research involving animal models and ascites production in areas of oncogenes and growth factors. Requires a PhD in Biology, Immunology or Pharmacology; experience in tumor model systems and pharmacokinetic analysis preferred. Refer to Job #89-880.

CANCER MARKERS

Evaluate new cancer markers for diagnostic use, such as immunopathology and immunodiagnostic body fluid tests. Requires a PhD in Biology and relevant experience evaluating markers. Refer to Job #89-063.

TUMOR BIOLOGY

Develop novel cancer therapies involving oncogenes, growth factors, cytokines and monoclonal antibodies. Requires a PhD in Biology, Immunology or Pharmacology. Prefer 5+ years' experience in tissue culture, tumor cell lines and models, immunoassays and basic molecular biology. Refer to Job #90-007.

Triton offers competitive salaries and benefits, including a special incentive of 15-30K and relocation assistance. For consideration, send your resume with cover letter, highlighting your skills and experience, to Triton Biosciences Inc., 1501 Harbor Bay Parkway, Alameda, CA 94501. EEO/AA employer.



Triton Biosciences Inc

POSITIONS OPEN

THE UNIVERSITY OF WAIKATO HAMILTON, NEW ZEALAND LECTURESHIP IN EARTH SCIENCES IN SOIL MECHANICS

A lectureship is available from September 1990 in the Department of Earth Sciences in the general area of soil mechanics and engineering geology, with competence in related fields. The appointee will assist with teaching, laboratory classes, and fieldwork in established earth science courses, will be required to supervise graduate and postgraduate research projects, and will foster and become involved in personal and/or collaborative pure and applied research programmes.

Applicants preferably should have a doctorate, or be about to gain one, or should have equivalent practical experience and research qualified in their field. The current salary range for lecturers is NZ\$36,000 to NZ\$47,200 per annum.

Further information about the activities and facilities of the department can be obtained from: Associate Professor C. S. Nelson, Chairperson, or Professor M. J. Selby, Department of Earth Sciences, FAX: 064-71-560115.

The method of application and conditions of appointment are available from: Appointments (37532), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK, or Academic Staff Registrar, University of Waikato, Private Bag 3105, Hamilton, New Zealand, FAX 064-71-560135. Applications, quoting reference number A90/13, close on 12 April 1990.

The University welcomes applications from suitable people regardless of race, creed, marital status, or disability.

MEDICAL MICROBIOLOGY/ MEDICAL TECHNOLOGY UNIVERSITY OF MONTANA

Tenure-track, ASSISTANT PROFESSOR starts September 1990 or January 1991. Coordinate the Medical Technology program and teach in the field of medical microbiology. Productive research, pursuit of outside research support, supervision of M.S. and Ph.D. students required. A Ph.D. and evidence of successful teaching required. Postdoctoral experience preferred. Review begins 20 April 1990 and continues until position is filled. Send curriculum vitae, description of teaching and research goals, and three letters of recommendation to: Medical Microbiology Search, Division of Biological Sciences, University of Montana, Missoula, MT 59812. Affirmative Action/Equal Opportunity Employer.

MOLECULAR NEUROBIOLOGIST NATIONAL INSTITUTES OF HEALTH (NIH)

The Neurocytology Section of the Neurobiology and Anesthesiology Branch (NAB) of the National Institute of Dental Research (NIDR) has positions available immediately to join a multidisciplinary group investigating models of neuronal development, injury, plasticity, regeneration, and nociception. Prior experience in molecular biology, and/or cell biology and biochemistry is required. The positions are at the STAFF FELLOW, SENIOR STAFF FELLOW, OR INTRAMURAL RESEARCH TRAINING AWARD (IRTA) levels and annual starting salary ranges from \$25,000 to \$35,000, depending on training and experience. Interested candidates should send curriculum vitae and names and addresses of three references to: M. A. Ruda, Ph.D., NIH/NIDR/NAB, 9000 Rockville Pike, Building 30, Room B-20, Bethesda, MD 20892. Telephone: 301-496-6804. NIH is an Equal Opportunity Employer.

RHEUMATOLOGY. We are seeking an individual at the ASSISTANT/ASSOCIATE PROFESSOR level to join the Division of Rheumatic Diseases at the University of Connecticut School of Medicine. The division is currently composed of eight full-time faculty with a broad range of basic and clinical research programs including autoimmunity, connective tissue, lymphocyte biology, and molecular biology. The applicant, M.D. or Ph.D., should have three or more years of postdoctoral research training and be capable of developing an independent research program in cell biology, molecular biology, or immunology. Position available July 1990. Please send curriculum vitae to: Dr. Naomi Rothfield, Division of Rheumatic Diseases, L-3071, University of Connecticut Health Center, Farmington, CT 06032.

Affirmative Action/Equal Opportunity Employer, M/W/H.

POSITIONS OPEN

PEDIATRIC HEMATOLOGY/ONCOLOGY.

The Department of Pediatrics, University of Arizona College of Medicine (U of A), has a full-time position at the ASSOCIATE PROFESSOR OR PROFESSOR level to head the section of hematology/oncology. Tenured position with clinical, teaching and research responsibilities. Board-certification or -eligibility in pediatrics and hematology/oncology are required. Send curriculum vitae to: Richard J. Lemen, M.D., Professor, Pediatrics, Arizona Health Sciences Center, 1501 North Campbell Avenue, Tucson, AZ 85724. The review of applications will begin 1 April 1990 and will continue until position is filled. The U of A is an Equal Opportunity/Affirmative Action Employer.

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 resume, three references, and transcripts to: Route 4, Box 1255, Woodland, CA 95695, Attention: Brett Sanders, Job #101. Equal Opportunity Employer.

ORGANIC CHEMISTRY

The Department of Biological and Physical Sciences invites applications for a tenure-track position at the ASSISTANT PROFESSOR level commencing August 1990. Responsibilities include teaching, at the undergraduate level, an introductory nonmajors course, a lower-level organic chemistry course for nursing and allied health students, and upper-level organic chemistry and biochemistry courses. Although teaching is a prime responsibility, research and service are also required. Publication is expected.

Desired qualifications include an earned doctorate, preferably in organic chemistry (individuals in biochemistry with graduate-level training in organic chemistry will also be considered), and college-level teaching experience in chemistry. Salary is competitive and includes an excellent fringe benefits package.

Send resume, copies of undergraduate and graduate transcripts, and the names, addresses, and telephone numbers of at least three references by 16 April 1990 to:

Dr. Robert Roales
Chairperson, Department of Biological
and Physical Sciences
Indiana University-Kokomo
P.O. Box 9003
Kokomo, IN 46904-9003

Indiana University at Kokomo is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Available to study the cell and molecular biological basis of receptor-mediated endocytosis and protein targeting. Candidates should submit curriculum vitae and names of two references to: Dr. Alan L. Schwartz, Departments of Pharmacology and Pediatrics, Box 8116, Washington University School of Medicine, St. Louis, MO 63110. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Chiron Corporation, a recognized leader in biotechnology, has a postdoctoral position available immediately to study Simian immunodeficiency virus (SIV) as part of an ongoing research program in AIDS vaccine development. Research will involve expression and characterization of SIV viral antigens in mammalian cells and yeast as part of an NIH-funded grant to study SIV as a model for HIV. In collaboration with scientists at the University of California, Davis, these recombinant antigens will be evaluated immunologically in rhesus macaques, with the potential for homologous virus challenge.

Ph.D. in biochemistry, virology, or molecular biology required. Chiron offers an excellent opportunity for professional growth and recognition and a competitive compensation and benefit package. Publication of important findings will be encouraged. Preference will be given to candidates who can start before June 1990.

Send curriculum vitae and the names of two references by 15 April 1990 to: Dr. Nancy L. Haigwood, Virology Department, Chiron Corporation, 4560 Horton Street, Emeryville, CA 94608.

CHIRON CORPORATION

Courses in Techniques for Separation and Characterization of Complex Carbohydrates

Two courses will be offered at the Complex Carbohydrate Research Center (CCRC) of the University of Georgia. The first course (*May 21-26, 1990*) will focus on the separation and characterization of oligosaccharides isolated from glycoproteins and is intended for those who have no experience with carbohydrate analysis. The second course (*May 29-June 2, 1990*), intended for scientists with some experience with glycoconjugates or for those who have completed the first course, will cover aspects of structural analysis of oligosaccharides and will focus on techniques of composition and linkage analysis. Both courses will consist of hands-on laboratory work as well as demonstrations and lectures. A lab manual including selected analytical techniques and references will be provided. Each course is limited to 10 participants. Experience with basic biochemical techniques is a prerequisite for participation. The cost of registration per course is \$250 for individuals from non-profit institutions; \$500 for others. The cost of lodging and food is not included.

A one-day symposium, *The Biochemistry and Molecular Biology of Complex Carbohydrates*, with lectures given by scientists with diverse interests in carbohydrate science, will be offered on May 23, 1990. The courses and symposium are sponsored jointly by the DOE/NSF/USDA Plant and Microbial Carbohydrate Center and the NIH Biomedical Carbohydrate Resource Center of the CCRC. For further information and application forms for the courses contact: Dr. Roberta K. Merkle, Technical Director for Biomedical Carbohydrates, Complex Carbohydrate Research Center, 220 Riverbend Road, The University of Georgia, Athens, Georgia 30602. Facsimile: 404-542-4412. Phone: 404-542-4405.

ABBOTT LABORATORIES

Abbott Laboratories' Pharmaceutical Products Division is a leader in the development and manufacture of anti-infective, cardiovascular and anti-convulsant/neurological products. Our commitment to a research-based drug discovery effort is reflected in our investment in R&D which is twice the industry standard. We maintain a variety of specialized labs featuring state-of-the-art research technologies. To support our efforts in the anti-infective area we seek the following individuals:

POSTDOCTORAL FELLOW—Antiviral Program

Working with virally-encoded enzymes, the selected candidate should have experience in enzyme isolation, kinetics, and protein chemistry. Experience working with viruses or with protein expression in recombinant systems is a plus. The successful candidate will be expected to conduct publishable research and contribute to an ongoing, federally funded drug discovery effort. A Ph.D. in Biochemistry or related discipline is necessary, along with 0-3 years of postdoctoral experience. **Job #7623.**

SENIOR BIOCHEMIST—Antifungal Program

The selected candidate will work with enzymes, including enzyme purification, kinetics, and mechanistic studies. Additional responsibilities include the identification and characterization of novel fungal target enzymes. Experience working with fungi or with the cloning and expression of fungal enzymes is highly desirable. A Ph.D. in Biochemistry or related discipline with at least 2 years of postdoctoral experience is required. **Job #7620.**

Abbott offers competitive compensation and benefits, including a profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. For consideration, please send your resume, indicating Job Number interested in, to: **Patricia Handy, Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer.

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Bachelor's degree in a biological science and three years of progressively responsible experience in molecular biology. One position prefers experience in flow cytometry. Salary \$28,080-43,368.

Research Technician III

Bachelor's degree in a biological science with background and experience in molecular biology, biochemistry or cell biology. Salary \$21,672-32,880.

We offer a salary commensurate with your experience and education, along with comprehensive benefits. **For an application, please telephone (919) 962-2991 or write: Employment Division, 111 Pettigrew Hall, CB #1040, Chapel Hill, NC 27599-1040.**

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TRUDEAU INSTITUTE, INC. POSITIONS AVAILABLE

BASIC RESEARCH SCIENTISTS

As part of its ongoing recruiting program, the **TRUDEAU INSTITUTE** is interested in hiring one or two appropriately trained **CELLULAR** or **MOLECULAR IMMUNOLOGISTS** at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. The successful applicants will be provided the resources to develop their own research programs emphasizing cellular or molecular immunology. However, it is hoped that they would also use the opportunity to investigate some of the well established *in vivo* models of immunity being studied here. Research at the Institute is directed at studying the immune response to infectious agents, cancers, and allografts at the physiological and cellular levels.

POST-DOCTORAL POSITION

A **POSTDOCTORAL POSITION** in **IMMUNOLOGY** is available to study the immune response to tumors and certain bacterial pathogens as models of immunoregulation. Candidates with training in cellular and/or molecular immunology who are interested in using their training to analyze *in vivo* models of successful and unsuccessful immune responses should apply. A competitive salary and fringe benefits are offered and institute housing will be made available. Future employment is possible, depending on performance.

THE TRUDEAU INSTITUTE is a free-standing, not-for-profit, basic research institute with modern facilities, up-to-date equipment, in-house animal production, efficient management and an international reputation for excellence. Current staff interests include: cancer immunology, transplantation immunology, immunity to infectious and parasitic diseases, regulation of immune responses, and the production and function of cytokines. Adequate start-up funding for new projects is available from Institute resources. Salaries and benefits are competitive, and working conditions are conducive to a productive research career.

Applications consisting of a curriculum vita, the names and addresses of three references, and a brief description of research interests, should be addressed to:

Dr. Robert J. North, Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983

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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

ANTIBODY ENGINEER

SmithKline Beecham Pharmaceuticals is among the world's top research and development companies. Our U.S. Research & Development complex is a state-of-the-art facility located in suburban Philadelphia. We currently have an opportunity for a Ph.D. to work within our Molecular Genetics Department. As an Antibody Engineer, you'll be applying new methods of PCR cloning and bacteriophage expression to the generation of therapeutically relevant monoclonal antibodies.

We're looking for a progressive-thinking individual with a Ph.D. in Biological Sciences or equivalent background, at least one year of Postdoctoral experience in academia or industry and thorough knowledge of standard molecular biology techniques. We also prefer experience in cloning, analysis and manipulation or expression of immunoglobulin genes as well as hybridoma technology.

We offer an excellent salary, benefits and the resources and motivation to take your work to the limit. If this is the kind of environment you're looking for, send your C.V. to: Barbara Schwartz, Senior Employment Administrator, S0124, SmithKline Beecham Pharmaceuticals,

P.O. Box 1539, King of Prussia, PA 19406-0939.
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RESEARCH SCIENTISTS

EG&G Idaho, Inc. is the prime contractor for the Department of Energy at the Idaho National Engineering Laboratory (INEL). Our Biotechnology group is currently developing continuous bioprocessing technologies for the microbial biodegradation of industrial solvents (e.g. using toluene, xylene, etc.). This group is seeking scientists with a background in biodegradation/metabolism of toxic organic compounds, and experience working with *Pseudomonas* species. The ideal candidates should have a research background in microbiology or biochemistry and have at least a Master's degree. The successful candidates will work with a multidisciplinary group of scientists in a new, well equipped laboratory facility in the city of Idaho Falls. The facility includes specialized laboratory space for scale-up of bioprocesses.

EG&G Idaho offers competitive salaries and a comprehensive benefits program. Idaho's diverse lifestyles and friendly family oriented communities and spectacular natural beauty is a magnificent setting in which to live and work, providing a "quality of life" that is difficult to match.

Please submit your resume, references and salary history to **Employment Services, (WLS-87), EG&G Idaho, Inc., P.O. Box 1625, Idaho Falls, Idaho 83415-3127**. Equal Opportunity Employer M/F/H/V. U.S. Citizenship required.

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POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

Position available to study the large-scale organization of eukaryotic chromosomes, focusing on the structure of chromosomes during meiosis in the yeast *Saccharomyces cerevisiae* and using a combination of genetic, molecular and cytological techniques. Those with prior experience or with an interest in chromosome organization, yeast artificial chromosomes, chromosome pairing or meiotic recombination are particularly urged to apply.

Please send letter and curriculum vitae, or call (405) 271-7682.

Michael E. Dresser, M.D., Ph.D.
Program in Molecular
and Cell Biology
Oklahoma Medical
Research Foundation
825 N.E. 13th Street
Oklahoma City, OK 73104

OMRF

EOE/Affirmative Action Employer. OMRF encourages women and minorities to apply.

UCAR POSTDOCTORAL PROGRAM IN OCEAN MODELING

The University Corporation for Atmospheric Research and the ocean sciences community have established a postdoctoral program whose purpose is to help create the next generation of broadly trained ocean modelers. The postdoctoral fellows are associated with experienced, established scientists in oceanography, and work together with them on jointly selected modeling projects. Applications are solicited from both prospective fellows and host scientists.

- **Qualified postdoctoral fellows** should apply by sending a resume and a statement of research interests as well as the names and addresses of four professional references. Applicants may also indicate research institutions that may be of interest to them.

- **Qualified host scientists** are encouraged to apply by sending a proposal, not to exceed five pages, describing their current research activities and the project area that they would recommend for a postdoctoral fellow. The ability to provide training for the fellow should be discussed.

Applications and host proposals should be submitted by 1 May 1990 to Meg Austin, UCAR Projects Office, P.O. Box 3000, Boulder, CO 80307. To receive more details regarding the program, contact her at (303) 497-8995 or via e-mail at M.AUSTIN@OMNET).

The National Science Foundation and the Office of Naval Research sponsor the program.



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MOLECULAR BIOLOGY/BIOCHEMISTRY

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DIVISION OF FOOD PROCESSING DAIRY RESEARCH
LABORATORY
HIGHETT, VICTORIA, AUSTRALIA

THE DIVISION: The Dairy Research Laboratory at Highett, Victoria is part of the Division of Food Processing. This position will be available at the CSIRO laboratory situated within the Russell Grimwade School of Biochemistry, University of Melbourne, Parkville, Victoria. This laboratory is engaged in basic and strategic research on the molecular biology of bacteria used in dairy fermentations and the bacteriophage which infect these microorganisms.

THE JOB: The successful applicant will undertake research aimed at the construction of bacteriophage resistant cheese starter bacteria, using "gene shears" technology, i.e. the construction of ribozymes active against the m-RNA produced by the bacteriophage. This will involve investigations into the life cycle of the bacteriophage, including transcript mapping, DNA sequence determination, the construction of appropriate vectors for cloning bacteriophage DNA into **Lactococci** and testing the efficacy of the bacteriophage resistant strains produced.

THE PERSON: Applicants should hold a Ph.D. degree or equivalent with extensive experience with molecular biology techniques and the ability to work independently in a team environment. The successful applicant will be required to supervise junior staff. Experience with bacteriophage and microbiological systems would be an advantage.

CONDITIONS: Appointment will be for 3 years, subject to satisfactory progress, Australian Government superannuation benefits are available.

MORE INFORMATION: Prospective applicants may contact Dr. A.J. Hillier on (613) 344 5915 (phone) or (613) 347 7730 (fax) for further information. A detailed job description and selection criteria are available on request from Mr. M. Kenward on (613) 556 2318 (phone), (613) 532 0003 (fax), or telex AA33766.

APPLICATIONS: Applications should be submitted by 27th April 1990 quoting reference No. ALRS01. They should be framed against the selection criteria and should state relevant personal details, including details of qualifications and experience. Applicants should nominate at least two professional referees and address their applications to:

**Dr. A.J. Hillier, Russell
Grimwade School of
Biochemistry, University of
Melbourne, Parkville 3052.**



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GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

The Geneva molecular biology research unit of the largest U.K. pharmaceutical group is recruiting a

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To join an established and growing group of scientists discovering and developing novel targets for antifungal compounds. The ideal candidate will have a PhD, post-doctoral experience and a proven track record of yeast research.

The Glaxo Institute for Molecular Biology carries out long-term research to support the company-wide effort to discover effective new medicines. The Institute has an international staff of over one hundred, grouped in teams of specialists from several domains of modern biology.

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If you are interested in this position, please send your Curriculum vitae with a list of publications and the names of three referees to : Rita Gloor, Personnel Manager, GLAXO IMB S.A., 46, route des Acacias, 1211 Geneva 24, Switzerland.

POSITION AVAILABLE DIRECTOR, MEDICATIONS DEVELOPMENT DIVISION 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.

THE ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION IS AN EQUAL OPPORTUNITY EMPLOYER

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study mechanisms of anesthesia at the subcellular and molecular level with electron probe microanalysis and photoaffinity labeling. Background in biochemistry desirable. *U.S. citizenship or permanent residence visa required.* Send curriculum vitae and references to: **Dr. Henry Shuman, Institute for Environmental Medicine, University of Pennsylvania Medical Center, 1 John Morgan Building, Philadelphia, PA 19104-6068. Telephone: 215-898-3408.**

NEUROIMMUNOLOGY

POSTDOCTORAL POSITION. Ph.D. to study effects of immune cytokines on neurotransmitter gene expression. Salary: \$25,000 per year. Send curriculum vitae and telephone numbers of three references to: **Dr. G. Miller Jonakait, Rutgers University, 101 Warren Street, Newark, NJ 07102. Telephone: 201-648-5081.**

POSTDOCTORAL POSITIONS IN MOLECULAR VIROLOGY. Available immediately. Topics include (i) the development of influenza virus as a general expression/vaccine vector, (ii) structure/function relationships of viral polypeptides and analysis of influenza virus replication through the construction of mutant viruses, and (iii) possible viral etiology in the development of Type 1 diabetes. Background in molecular biology or virology desired. Competitive salary, subsidized housing available. Send curriculum vitae and names of three references to: **Dr. Mark Krystal, Department of Microbiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Affirmative Action/Equal Opportunity Employer.**

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.**

POSTDOCTORAL POSITION VISUAL CORTICAL PHYSIOLOGY THE SALK INSTITUTE

A postdoctoral research position is available immediately at the Salk Institute for a neurophysiologist interested in the physiological basis of visual perception. The laboratory is currently investigating the temporal dynamics of interactions among populations of neurons in both cat and monkey visual cortex. Electrophysiological experience necessary. Familiarity with methods in visual cortical physiology and/or anatomy useful but not essential.

Please send curriculum vitae, statement of research interests, and names of three references to:

**Dr. Charles M. Gray
The Salk Institute
P.O. Box 85800**

San Diego, CA 92138-9216

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RESEARCH ASSOCIATE MEHARRY MEDICAL COLLEGE DIVISION OF BIOMEDICAL SCIENCES NASHVILLE, TENNESSEE

Meharry Medical College has an immediate position for a research associate who would be responsible for a Core facility in Cell and Molecular Biology. The Core facility would include an oligonucleotide synthesizer, a peptide synthesizer and a protein sequencer. An individual with previous experience in operating any of this equipment or a Core facility is preferable. Interested individuals should send curriculum vitae and the names of three references to:

**Dr. Getachew Kidane
Division of Biomedical Sciences
Meharry Medical College
1005 D. B. Todd Boulevard
Nashville, TN 37208
Telephone: 615-327-6499**

POSITIONS OPEN

POSTDOCTORAL POSITION GROWTH AND REPRODUCTION

A newly established Department of Molecular Endocrinology has an opening for a Ph.D. (biological sciences) to study the physiological role of intragonadal polypeptide hormones, growth factors and their binding proteins in growth and reproduction. Candidate will be expected to participate in one or more of the following areas of research: (i) functional heterogeneity of granulosa cells using the reverse-hemolytic plaque assay; (ii) central actions of gonadal polypeptide hormones; (iii) paracrine/autocrine regulation of FSH secretion; and (iv) role of indigenous pituitary insulin-like growth factor binding proteins in regulating GH secretion. Interaction with molecular biologists and biochemists within the department is encouraged. Salary will follow NIH pay scales for postdoctoral fellows and be commensurate with experience. If interested, please send curriculum vitae and the names of at least three references to: **Dr. Louis V. DePaolo, Department of Molecular Endocrinology, The Whittier Institute for Diabetes and Endocrinology, 9894 Genesee Avenue, La Jolla, CA 92037. Equal Opportunity Employer, M/F/H.**

SYNTHETIC CHEMISTRY INHIBITOR DESIGN

A **POSTDOCTORAL** position is available involving the design, synthesis, and evaluation of novel ligands for the sialic acid binding site of the influenza virus hemagglutinin. Applicants should have experience in synthetic organic chemistry and experience or interest in structure-based ligand design. The project involves a multidisciplinary group of chemists, biochemists, theoreticians, virologists, and protein crystallographers interested in developing new antiviral agents. Excellent facilities for molecular modeling, including several high-performance graphics workstations, are available. [References: *Weis et al., Nature* **333**, 426 (1988); *Sauter et al., Biochemistry* **28**, 8388 (1989).] Applicants should send curriculum vitae and letters of reference to:

**Professor Don C. Wiley, Ph.D.
Department of Biochemistry
and Molecular Biology
Harvard University
7 Divinity Avenue
Cambridge, MA 02138**

UNIVERSITY OF CALIFORNIA, IRVINE POSTDOCTORAL RESEARCH IN PSYCHOBIOLOGY

The Department of Psychobiology, University of California, Irvine (UCI), anticipates filling several **POSTDOCTORAL RESEARCH POSITIONS** in the laboratories of the faculty with starting dates between 1 May 1990 and 30 November 1990. The current faculty and their research interests are: D. Aswad (Neurochemistry); C. Cotman (Synaptic Growth and Plasticity); R. Josephson (Comparative Physiology of Muscles); M.-L. Kean (Linguistics and Neural Mechanisms of Language Processing); H. Killackey (Developmental Neuroanatomy); M. Leon (Neurobiology of Early Learning); G. Lynch (Physiology, Neurochemistry); J. Marshall (Neural Plasticity of Catecholamines); J. McGaugh (Memory, Storage Processes); R. Miledi (Synaptic Physiology and Molecular Neurobiology); R. Neve (Molecular Neurobiology of Alzheimer's Disease); I. Parker (Synaptic Physiology); A. Starr (Cognition, Sensation and Evoked Potentials); K. Sumikawa (Molecular Neurobiology); N. Weinberger (Neural Mechanisms of Learning); and P. Yahr (Neuroendocrinology and Behavior).

Candidates should address inquiries to: **Postdoctoral Research Advisor, Department of Psychobiology, University of California, Irvine, CA 92717.**

UCI is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE NEUROENDOCRINOLOGY

The Physiology Department at the University of Virginia seeks an experienced neuroendocrinologist for research on the neural control of release of atrial natriuretic factor. The applicant must be skilled in surgery on experimental animals and must possess working knowledge of the anatomy, physiology, and pharmacology of the cardiovascular, respiratory, and autonomic nervous systems. Apply by 15 April 1990 to: **H. Kutchai, Box 449, University of Virginia Medical School, Charlottesville, VA 22908.**

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POSITIONS OPEN

POSTDOCTORAL RESEARCH MOLECULAR ONCOLOGY

Postdoctoral position available immediately in a newly established laboratory to study the role of the Fos-Jun family of transcription factors in controlling gene expression during the hematopoietic stem cell differentiation/proliferation. Specific areas of interest include: (i) characterization of genes induced by growth factors in stem cell population; (ii) isolation of novel Fos- and Jun-related genes; (iii) isolation of target genes for regulation by Fos-Jun complexes; and (iv) structure/function studies on transcriptional activation/repression by heterodimeric. Highly motivated individuals are sought, preferably with experience in DNA-protein interactions, protein biochemistry, and cDNA cloning. Interested candidates should send curriculum vitae and the names and telephone numbers of three references, in confidence, to: **Dr. Frank J. Rauscher, III, c/o Mark Heisler, Personnel Manager, The Wistar Institute, 36th and Spruce Streets, Philadelphia, PA 19104. Equal Opportunity Employer, M/F.**

Carnegie Mellon: **POSTDOCTORAL OR DOCTORAL RESEARCH** appointment to work on chemical engineering issues related to chemical weapon conventions. Should have a solid base in chemistry and understanding in the design of chemical plants. Involves strong interactions with the chemical industry and the negotiation process towards a chemical weapon convention. Send résumé to: **Benoit Morel, Engineering and Public Policy, Carnegie Mellon, Pittsburgh, PA 15213.**

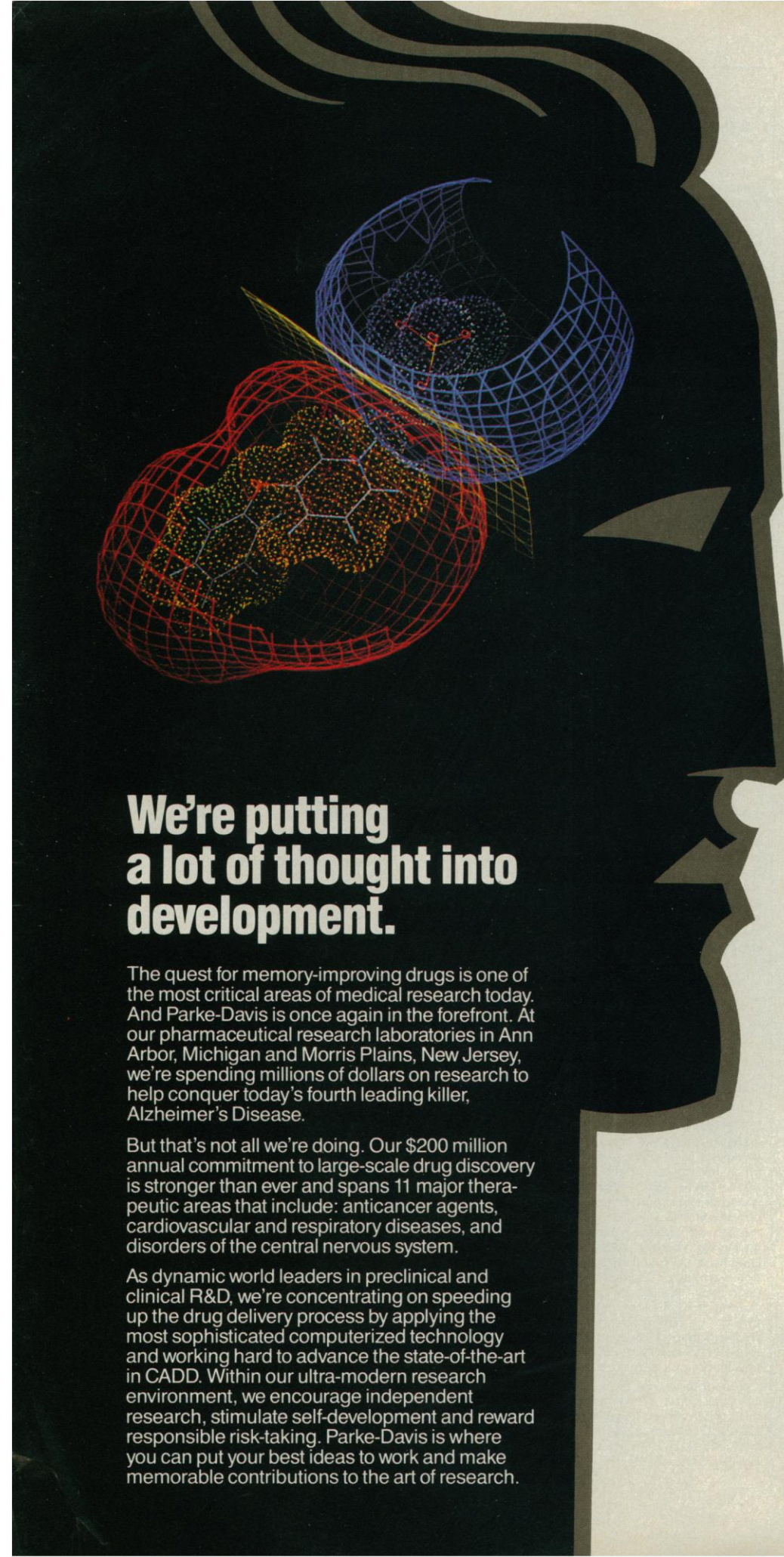
RESEARCH ASSOCIATES (POSTDOCTORAL). The Kentucky Lions Eye Research Institute has several positions available immediately for Ph.D. research scientists to work on the eye. Fields of study include: (i) microelectrode or patch-clamp examination of ciliary epithelium ion transport characteristics, (ii) studies on regulation of Na,K-ATPase activity in ciliary epithelium, (iii) investigation of calcium transport mechanisms in the cataractous lens. These positions require a Ph.D. and some understanding of membrane transport, membrane biochemistry, or electrophysiology; experience with eye tissues is not necessary.

The Kentucky Lions Eye Research Institute is a part of the University of Louisville School of Medicine. It has a faculty of 18, with research interests in cornea, lens, aqueous, and retina. The institute has close collaborative ties with the Departments of Anatomy, Biochemistry, Pharmacology and Toxicology, and Physiology. Interested candidates should send curriculum vitae and names of three references to: **Dr. Nicholas A. Delamere, Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville, KY 40292. Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATES

Recent Ph.D.'s/M.D.'s with interests in molecular and cell biology and/or electrophysiology to assist in the expansion of a new research program. Proficiency in relevant laboratory techniques, tissue culture, animal experimentation, and the ability to supervise a staff of technicians. Private foundation in the upper Midwest seeks to continue the development of goal-oriented research in the neural area, especially aimed at clinical applications to spinal cord injury. Applicants should submit curriculum vitae, summary of research interests, career expectations, and references. Send applications to: **Box 28, SCIENCE.**

ASSOCIATE RESEARCH SCIENTIST. Perform research to study and investigate the neuronal basis of behavior in insects and other simple invertebrates and the spread of epileptic events in mammalian cortex, using optical recordings based on voltage-sensitive dyes. Design and develop optical recording equipment. Write programs in assembly language for data acquisition, real time control of the experiment, and data analysis. Requires a Ph.D. in neurobiology or biophysics. No specific experience required. Requires strong background in microcomputers for real time data acquisition and experiment control; assembly language programming; neuronal basis of behavior in insect ganglia; noise suppression; and analogue electronics as evidenced by specific research work or doctoral level training in each discipline. Monday through Friday, 9:00 a.m. to 5:00 p.m., \$30,900 per annum. Please send résumé to: **Job Service Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109. Refer to Job Order #3067200.**



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Clinical Scientist

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

Neuroscientist

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

Associate Scientist

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

Biostatistician

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

To explore your future on the frontier of medical research, send your resume or curriculum vitae, in confidence, to:
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Bioanalytical Group Supervisor

California Biotechnology Inc., a leading biotechnology company engaged in developing human therapeutics and protein drug delivery systems, has an outstanding opportunity for a Bioanalytical Group Supervisor.

Apply your supervisory and bioassay skills to plan and direct the activities of a Bioanalytical group. In this supervisory position, you will oversee the research and development of in vitro (cell culture) assays and provide scientific expertise pertaining to the development and validation of bioassays. These assays are important for the discovery and evaluation of drugs for preclinical and clinical studies.

The successful candidate should have a PhD with 3-5 years of experience or equivalent, in cell biology, with emphasis on bioassay development. Excellent interpersonal and organizational skills, supervisory experience and familiarity with GLP are also required.

We offer a stimulating work environment with a competitive compensation and benefits package. For prompt consideration, please send resume to: California Biotechnology Inc., Dept. LM-JT 2450 Bayshore Parkway, Mt. View, CA 94043. EOE/AA.

CAL BIO

National Institute on Aging MEDICAL STAFF FELLOW

Physician-Scientist wanted for studies on the immune deficit and impaired function of T cells in aged individuals related to the rapid progression of AIDS in this population. Applicants must be graduates of an accredited medical school and a citizen of the United States or permanent resident. Salary dependent upon training and experience. Individuals primarily involved in AIDS research may have up to \$20,000/year of their qualified educational loans repaid. Submit curriculum vitae to:

Dr. William H. Adler
Chief, Clinical Immunology Section
National Institute on Aging
Gerontology Research Center
4940 Eastern Avenue
Baltimore, MD 21224
(301) 550-1755
Fax (301) 550-1888

NIH is an Equal Opportunity Employer

POSITIONS OPEN

RESEARCH ASSOCIATE. To design and conduct basic experimental research in vacuum ultraviolet spectroscopy and photoionization processes. Ph.D. in atomic and molecular physics plus practical experience with photoion and photoelectron spectroscopy, mass spectrometry, and synchrotron radiation. Publications; 40 hours per week, 9:00 a.m. to 5:00 p.m., \$20,000 per year. Send résumé to: **Job Service of Nebraska, P.O. Box 94600, Lincoln, NE 68509.** Refer to: **Job Order Number 520203.**

RESEARCH ASSOCIATE INDIANA UNIVERSITY SCHOOL OF MEDICINE

Department of Pediatrics, Section of Endocrinology, is seeking an individual with a Ph.D. and research experience in reproductive endocrinology or neuroendocrinology. Expertise in cellular and/or molecular techniques is required. An outstanding, new research facility will be opening in spring of 1990. The successful candidate will play a formative role in the development and direction of the section's laboratory efforts and will be expected to participate in collaborative research studies with other sections in the department and within the university. Please send a letter with curriculum vitae to: **Dr. Ora Pescovitz, Department of Pediatrics, Indiana University School of Medicine, 702 Barnhill Drive, Room A593, Indianapolis, IN 46202.** *Indiana University is an Equal Opportunity/Affirmative Action Employer, Employer, and Contractor, M/F.*

RESEARCH SCIENTIST. Madison, Wisconsin, pharmaceutical firm seeks a motivated individual to expand its R&D program in the area of thrombosis and hemostasis. M.S. plus experience or Ph.D. required. You must have a thorough knowledge of protein extraction and characterization. Aseptic processing and GMP's in the pharmaceutical industry a plus. Submit résumé with salary history/requirements to: **Ms. R. Quinn, GenTrac, Inc., 2232 Evergreen Road, Middleton, WI 53562.**

SENIOR RESEARCH ASSOCIATE SECTION LEADER PERMANENT POSITION ACADEMIC APPOINTMENT POSSIBLE

Experienced (Immunology) Histochemist at H. M. Bligh Cancer Biology Research Laboratory, UHS/Chicago Medical School. Benchwork/oriented individual with meticulous working habits. Original work on human carcinoma with stress on tumor cell membrane receptors. Knowledgeable in ultra-light and transmission electron microscopy. Technical help available. Especially outstanding salary and benefits in view of the importance of the academic task, not grant-dependent. Send curriculum vitae, details of benchwork expertise and bibliography to:

G. F. Springer, M.D., Head
H. M. Bligh Cancer
Biology Research Laboratory
Chicago Medical School
Veterans Administration Medical Center
3333 Green Bay Road
North Chicago, IL 60064
Equal Opportunity Employer, M/F

SENIOR RESEARCH SCIENTIST

The Maine Cytometry Research Institute (MCRI), a leader in clinical and basic science cytometry, is seeking to expand its scientific staff and is recruiting an established investigator at the **FULL PROFESSOR OR ASSOCIATE PROFESSOR** level. MCRI is a small nonprofit research institute affiliated with a large tertiary care hospital in southern Maine. The current areas of research are platelet biology, tumor biology, and the interaction among platelets, tumor cells, immune cells, endothelial cells, and the extracellular matrix. In addition, a cytometric approach to molecular genetic assays is under way. We are looking for a candidate with an ongoing research program in cellular or molecular biology, cell to cell interactions, cell adhesion, or other complementary discipline. New laboratory space, equipment, and facilities are available, and our salary and start-up support are nationally competitive.

For consideration, please send a letter of application, curriculum vitae, representative publications, and statement of current research interests to: **Edmund J. Lovett III, Ph.D., Director, MCRI, 190 Park Avenue, Portland, ME 04102.** *MCRI is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

CORTECH, INC.

Cortech, Inc., is a Denver-based research and development company specializing in the areas of immunology, inflammation, and receptor pharmacology.

DIRECTOR OF RESEARCH

The successful candidate will enter an environment of complete commitment to specific technological models with potentially revolutionary implications in many of the as yet unsolved areas of drug development. The director will interact extensively with the company's scientific founder and chief scientific officer, be responsible for facilitating transfer of technology between Cortech's research and product development groups, and be a part of a scientific committee which reviews corporate priorities and research directions. The successful candidate will have recognized scientific expertise in a biomedically related research discipline and experience in managing and directing an interdisciplinary research group in either industry or academics.

PHARMACOLOGY

We are seeking a Ph.D. level pharmacologist/physiologist with a minimum of 1 to 2 years of postdoctoral experience to join a multidisciplinary team concerned with the development of peptides and peptide analogs for the treatment of human disease states. The successful candidate will have experience with a variety of in vitro and in vivo models for the assay of pharmacologically active compounds. Experience in toxicology, receptor-ligand binding, and/or pharmacokinetics would be useful, but not essential.

IMMUNOLOGY

We are seeking Ph.D. level candidates with at least 2 years of postdoctoral experience in cell proliferation assays, polyclonal and monoclonal antibody production, immunoaffinity purification, and ELISA. Experience in protein chemistry, immunochemistry, immunopharmacology, or cell biology is highly desirable.

PEPTIDE CHEMISTRY

We are seeking Ph.D. level candidates in peptide chemistry or organic chemistry/biochemistry with significant peptide chemistry experience. A minimum of 1 to 3 years of postdoctoral experience is also required. Research experience should include solution and solid-phase synthesis of peptides, purification, characterization, and structure determination. Additional experience in the following areas would be considered favorably: stereoselective/stereospecific synthesis of novel amino acids, HPLC, biochemistry, and molecular modeling.

RESEARCH ASSISTANTS

Positions are open for research assistants in these three areas as well. These positions require a B.S. or M.S. and several years of experience in the field.

Cortech offers a stimulating environment where a multidisciplinary approach is employed in order to develop new technologies for the treatment of human disease. Cortech is an Equal Opportunity Employer and offers an excellent compensation and benefits package including stock options.

Please send curriculum vitae to:

Cortech, Inc.
6840 North Broadway, Suite F
Denver, CO 80221

ASSISTANT RESEARCH BIOCHEMIST. Cell biology and biochemistry of photoreceptors, with particular emphasis on regulation and composition of the cytoskeleton. The applicant should have postdoctoral experience in retinal biology, biochemistry, and cell motility. Send curriculum vitae, relevant reprints, and three letters of recommendation before 23 April 1990. Send to: **Dr. Beth Burnside, Department of Molecular and Cell Biology, 335 Life Science Addition, University of California (UCB), Berkeley, CA 94720.** *UCB is an Affirmative Action/Equal Opportunity Employer.*

Opening exists in the Dermatology Research Unit for an **ASSISTANT RESEARCH BIOCHEMIST.** Ph.D. with 1 year of postdoctoral training and at least 2 years of work experience in light and electron microscopy, knowledge and at least 2 years of work experience in handling tissues from vertebrate species (mammals, avians, reptiles). The incumbent will function as a co-director of research program. Send applications to: **Peter M. Elias, M.D., Dermatology Service (190), Veterans Administration Medical Center, 4150 Clement Street, San Francisco, CA 94121.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

THERE IS NOTHING SO STRONG AS THE RELATIONSHIPS THAT SUSTAIN LIFE.



Nourishment, protection, procreation. For the inhabitants of a Pacific Northwest Coast tide pool, these vital activities are rooted in a unique set of interdependent relationships. Relationships that allow each member to benefit from the strengths and resources of every other member in this delicate ecosystem.

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

The reason behind this initiative is simple. For Johnson & Johnson to continue as the world's health care products leader, we must make a firm and focused investment in the areas of drug discovery and development. And we're doing this by pooling the minds and resources of Ortho Pharmaceutical Corporation R&D, Cilag International Research Center, McNeil Pharmaceutical R&D, Ortho Biotech R&D and Johnson & Johnson Biotechnology Center.

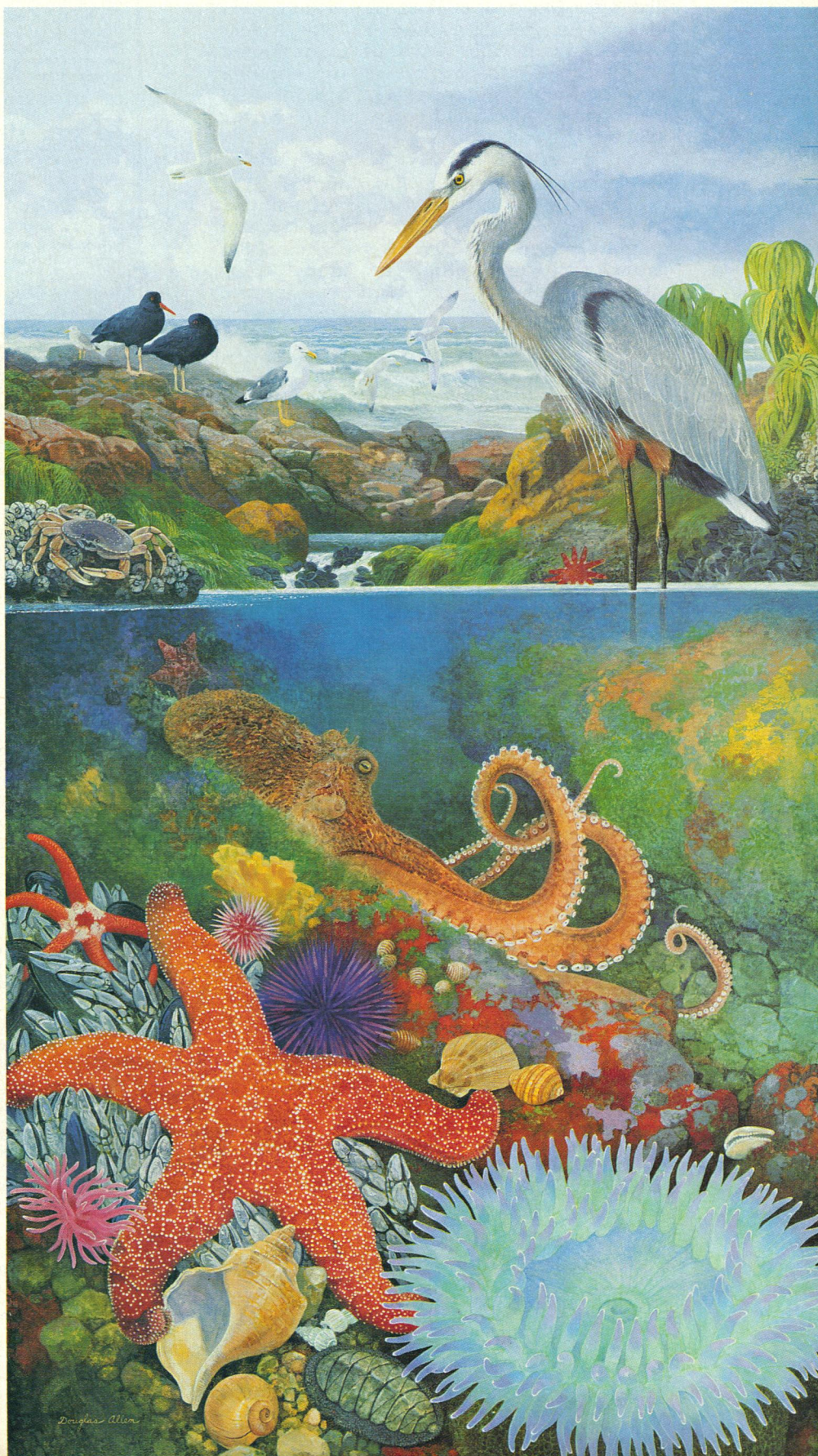
Together, we have the strength and mass to meet the challenges of today's competitive research environment. And by meeting these formidable challenges, we will establish PRI as one of the world's leading pharmaceutical R&D companies. To do this, we're continually seeking entry through senior level candidates to join us at one of our several sites in the following fields: pharmacy, biology, biochemistry, toxicology, immunology, chemistry, microbiology, biochemical engineering, pharmacology, pathology, statistics, nursing and medicine. Send your resume to: Selection Dept. SC-323, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602.

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CHIEF EXECUTIVE OFFICER

IMMUNOTHERAPEUTICS, INC., a leading biotechnology company involved in the development of immunopharmaceutical drugs for the treatment of cancer and other diseases, is seeking a Chief Executive Officer with at least five years of management experience. Prior experience in corporate development and/or the design and management of clinical trials, and new drug applications, is desirable.

IMMUNOTHERAPEUTICS drug development programs include ImmTher™, a macrophage activator, in Phase II clinical trials in patients with metastatic disease; and the development and commercialization of the proprietary technology of immobilized cytokines for in-vitro and therapeutic applications.

IMMUNOTHERAPEUTICS offers a competitive salary, benefits and stock option program.

Respond to Gerald Voska, Chairman, 509-25th Avenue North, Fargo, ND 58102.

IMMUNOTHERAPEUTICS is an equal opportunity employer.



RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology Research at Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities, and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, gene expression, gene isolation or RFLP programs.

PROJECT COORDINATOR-GENE EXPRESSION GROUP — This position will coordinate the Department's effort in plant gene expression. This group comprises several labs which are isolating plant regulatory sequences, constructing plant expression vectors and inactivating genes via antisense RNA or homologous recombination. The Gene Expression Group collaborates directly with the Gene Isolation and Transformation Groups. The Project Coordinator will also manage their own research project. A Ph.D. or equivalent in molecular biology, biochemistry, biology or other related discipline is required and 5-10 years applicable experience.

CELL/MOLECULAR BIOLOGIST-MAIZE TRANSFORMATION — This position will complement the maize transformation program with emphasis on developmental biology and new transformation protocols for maize. The successful candidate will be expected to initiate an innovative research program through collaboration in the Transformation and Gene Expression Groups. A Ph.D. or equivalent in cell or molecular biology, or a related field is required with an additional 2 years of relevant research experience.

PLANT GENETICIST/BREEDER-SOYBEAN RFLP — This position will complement an existing RFLP group with emphasis on establishing a soybean research program of laboratory evaluation, statistical analysis and coordination of field studies. Complementary expertise in field breeding and statistical analysis is an integral part of the group. A Ph.D. or equivalent in plant breeding, genetics or related disciplines with experience in RFLP technologies and their application to plant breeding is required.

APPLIED MOLECULAR BIOLOGY — This position will complement the transformation effort with duties consisting of verifying the presence and expression of genes in transgenic field crops. The successful candidate will manage a lab that uses enzyme assays, DNA analysis including Southern and PCR, RNA analysis and immunochemistry in tracking gene presence and activity in primary transformants and their progeny. Some technique development may be required. A Ph.D. or equivalent in molecular biology or related discipline required with an additional 2-4 years applicable experience.

Pioneer Hi-Bred International is an Equal Opportunity/ Affirmative Action Employer. Send resume including the names of at least three references, and the position for which you are applying to:



PIONEER HI-BRED INTERNATIONAL, INC.

7300 N.W. 62nd Avenue • P.O. Box 38 • Johnston, IA 50131
Attn: Jo Ann Jorgensen

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Director of Cancer Control Research

Duke Comprehensive Cancer Center is seeking a Director of Cancer Control Research. The successful candidate should hold a Ph.D. or M.D. degree and have demonstrated expertise in research regarding cancer prevention, detection and control, reflected in publications and peer-reviewed funding. Experience in the design and execution of community-based trials would be particularly relevant. Such an individual will coordinate the Duke Cancer Control Program with new and existing research programs in cancer diagnosis, nutrition and chemoprevention. A faculty appointment will be available in the appropriate Medical Center department at a level commensurate with the experience of the successful applicant.

Please send CV to Robert C. Bast, Jr., M.D., Director, Duke Comprehensive Cancer Center, Box 3814, Duke University Medical Center, Durham, NC 27710, or call (919) 684-3377.

Duke University

A Universe of Opportunity

Duke University is an Equal Opportunity/
Affirmative Action Employer.

RESEARCH OPPORTUNITIES

CONNAUGHT LABORATORIES, a dynamic pharmaceutical company in Swiftwater, PA, remains at the forefront of immunology product development. Vital research on vaccine adjuvants has generated the following career opportunities:

Research Scientist—This demanding role involves the supervision of a research team working on the development of effective vaccine adjuvants. You will design and perform experiments on adjuvant preparation and characterization and analyze/report on experimental results. Qualified individuals will possess a Ph.D. in Biochemistry or Chemistry and direct experience in analytical lipid chemistry and particle size analysis. Post-doctoral or industrial experience in the preparation and characterization of vaccine adjuvants required; must have strong publication record in the area of liposome technology. Experience with biologicals an asset.

Sr. Research Assistant—Be an integral member of a research team developing effective vaccine adjuvants. Responsibilities will include designing/performing experiments leading to stable lipid-based vaccine adjuvants and developing methods for characterizing same. Qualified candidates will possess an MS degree with 1-2 years relevant experience (or a BS with 2-4 years experience) and keen analytical biochemistry and math skills. Some statistical skills and experience in the preparation/characterization of lipid-based adjuvants required. Experience with biologicals an asset.

For consideration (either position), please send resume/salary requirements to: **Human Resources, CONNAUGHT LABORATORIES, INC., Dept. SC23, Rt. 611, P.O. Box 187, Swiftwater, PA 18370.** Equal opportunity employer.



CONNAUGHT
LABORATORIES, INC.

**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

**ENDOWED POSTDOCTORAL FELLOWSHIPS
in Basic Biomedical Research**

St. Jude Children's Research Hospital

St. Jude Children's Research Hospital, a premier center for basic biomedical research and catastrophic diseases of children, invites applications for the **George J. Mitchell and Richard A. Gephardt Endowed Fellowships in Basic Science Research**. The fellowships are available to recent Ph.D. or M.D./Ph.D. graduates who wish to gain training and experience in one of the areas of basic science available at this center. These include biochemistry, Chairman Dr. James Ihle; immunology, Chairman Dr. Peter Doherty; pharmacology, Chairman Dr. Raymond Blakley; tumor cell biology, Chairman Dr. Charles Sherr; and virology/molecular biology, Chairman Dr. Robert Webster.

These endowed fellowships are awarded for up to three years and are based on merit, recommendations and promise of a productive career in basic research.

Applications will be considered for a July-September 1990 beginning date.

The George J. Mitchell and Richard A. Gephardt Endowed Fellowships were established by the American Lebanese Syrian Associated Charities/St. Jude Children's Research Hospital Boards of Governors and Directors to honor Senator George Mitchell, Senate Majority Leader, and Representative Richard Gephardt, House Majority Leader, for their fundraising efforts on behalf of St. Jude Children's Research Hospital.

St. Jude Children's Research Hospital is an Equal Opportunity/Affirmative Action Employer.

For more information and application contact:



Allan Granoff, Ph.D., Deputy Director
St. Jude Children's Research Hospital
P.O. Box 318
Memphis, TN 38101-0318
Phone: (901)522-0301
FAX: (901)527-2270

STERLING RESEARCH GROUP

**Discover Pathology
At Sterling Research Group.**

Discover a bright future at the Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Incorporated.



**SECTION HEAD,
PATHOLOGY**

This senior position will be responsible for supervising and coordinating all operations of the pathology section of the Sterling Research Group. The successful candidate must have broad-based experience in toxicologic pathology including anatomic and clinical pathology of laboratory animals and electron microscopy. Experience in preparation and submission of pathology reports to regulatory agencies in support of drug applications is highly desirable. Research proficiency as evidenced by a strong publication/technical report record and experience in personnel management are essential. The candidate is expected to develop a research program that complements ongoing pharmaceutical discovery and development.

Ph.D. and D.V.M. (or equivalent) is required. Certification by the American College of Veterinary Pathologists is also required. To apply, please send your resume and salary history to: RS-67, Sterling Research Group, 81 Columbia Turnpike, Rensselaer, NY 12144. An Equal Opportunity Employer M/F/H/V.



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U.S. DEPARTMENT OF ENERGY

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Artificial Intelligence	Life Sciences
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- Recent graduate degree
- U.S. citizens or PRAs eligible

Information and applications:



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

POSTDOCTORAL SCIENTIST RESEARCH SCIENTISTS

HYBRITECH INCORPORATED is a worldwide, research-based corporation applying monoclonal antibody and other leading-edge technology to the development of human health care. Hybritech is a subsidiary of Eli Lilly and Company, a Fortune 100 firm. Hybritech has several challenging opportunities for talented individuals in its Therapeutic Division. These scientists will play a key role in developing antibody-based radiopharmaceuticals for the diagnosis and treatment of human disease. Openings exist in the Therapeutics Division, Radiopharmaceutical Chemistry and the Bioanalytical Technology groups.

POSTDOCTORAL SCIENTIST

We have a current opportunity for a Ph.D. to do a 1 or 2 year industry-based postdoctoral appointment in our Therapeutics Division. This individual will primarily be responsible for a targeted delivery system for oncolytic drugs; investigating the pharmacokinetic extrapolation from small animals to humans; and designing/performing experiments to test the model. The ideal candidate will possess a Ph.D. and have experience with pharmacological models and chemical pharmacology; familiarity with tumor physiology and pharmacology of proteins; and familiarity with drug delivery systems.

RADIOPHARMACEUTICAL SCIENTIST

This individual will be responsible for the synthesis and evaluation of ^{99m}Tc complexes for antibody-based diagnostic radiopharmaceuticals. Requires a Ph.D. in chemistry with experience in synthesizing and characterizing inorganic complexes. Experience with NMR, HPLC and TLC are essential. Previous experience with Technetium chemistry and working with radioactivity are highly desirable, but not required. This individual must be able to function effectively as a team member and should have excellent communication and interpersonal skills.

BIOANALYTICAL SCIENTIST

This position in the Bioanalytical Technology Group is for an individual who would be responsible for developing identity for functional assays. Additionally, we would expect this person to evaluate and determine the feasibility of new technologies for protein characterization. This position would require the ability to communicate clearly and effectively with a variety of people. The individual must also have the necessary skills to be able to train less-experienced personnel. Requires a Ph.D. in chemistry or biochemistry with previous experience in developing analytical methods based on HPLC. Experience in peptide mapping and amino acid sequencing would be desirable, as would previous experience in working with radioisotopes.

HYBRITECH offers a stimulating work environment and competitive salaries and benefits. Please send your resume to the HR Dept. SM C&EN 3/12/90-PDS/S, HYBRITECH INCORPORATED, P.O. Box 269006, San Diego, CA 92126-9006. An equal opportunity employer



EUGENE P. WIGNER FELLOWSHIP PROGRAM OAK RIDGE NATIONAL LABORATORY

The Oak Ridge National Laboratory announces openings for the Eugene P. Wigner Fellowships, in honor of Professor Eugene P. Wigner, Nobel laureate (1963) and former Director of Research at the Oak Ridge National Laboratory. The annual appointment of approximately five new engineers, life, physical, and social scientists to select and pursue research in an area related to national energy problems and interests. Eugene P. Wigner Fellows must be exceedingly well qualified and be no more than three years beyond their doctorate degree. Fully competitive salaries are offered for these prestigious two-year appointments. Except for unusual circumstances, Fellows may expect to be offered regular appointments at the Laboratory when their fellowships expire. Benefits, travel, and relocation expenses will be borne by the Laboratory.

Resumes and letters referring to this notice should be sent to:

Eugene P. Wigner Fellowship Selection Panel
Ph.D. Employment Office
Oak Ridge National Laboratory
Oak Ridge, Tennessee 37831-6216

The Oak Ridge National Laboratory, operated by Martin Marietta Energy Systems, Inc., for the Department of Energy, is an Affirmative Action/Equal Opportunity Employer.



POSITIONS OPEN

ASSOCIATE DIRECTOR FOR RESEARCH CENTER ON AGING

Established investigator, preferably M.D., with reputation in research in Geriatrics. Resources are available to build a strong research program. Duties will include the coordination of all research and research training activities of the center. Successful candidate must have record of scientific publication, grant acquisition, and ability to manage major research program, and be eligible for academic appointment at the associate or full professorial rank. Send letter of intent and curriculum vitae to: **Morton C. Creditor, M.D., Director, Center on Aging, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103, telephone: 913-588-1265.** *The University of Kansas is an Equal Opportunity Employer.*

RESEARCH ASSOCIATE POSITIONS are available for recent Ph.D.'s to study (i) protein kinase C (PKC) system in regulation of leukemia and neuroblastoma cell growth and differentiation, (ii) regulation of Ca^{2+} sensitivity and activity of cardiac actomyosin ATPase, (iii) identification and functional characterization of PKC substrates in heart and brain relevant to pathophysiology, and (iv) development of specific and potent PKC inhibitors as research tools and therapeutic agents.

Send applications and curriculum vitae to: **Dr. J. F. Kuo, Department of Pharmacology, Emory University School of Medicine, Atlanta, GA 30322.** *Emory University is an Affirmative Action/Equal Opportunity Employer.*

HEMATOLOGY/ONCOLOGY RESEARCH

M.D. or Ph.D. with expertise in lymphocyte studies in a project concerning B-cell chronic lymphocytic leukemia. Experience with B-cell biology and cellular immunology preferred. Competitive salary and benefits. Send curriculum vitae to: **Kanti R. Rai, M.D., Chief, Division of Hematology/Oncology, Long Island Jewish Medical Center (LIJMC), New Hyde Park, NY 11042.** LIJMC is the Long Island Campus for the Albert Einstein College of Medicine. *Equal Opportunity Employer.*

MRI SCIENTIST to direct research and assist with pediatric applications of MRI at The Children's Hospital, Boston/Harvard Medical School. Qualified candidates will possess a Ph.D. in medical physics, physics, or chemistry; 3 years of substantial MRI experience; a demonstrated record of research productivity and an interest in teaching. Preference will be given to candidates with experience in spectroscopy. Successful candidates must be able to carry out independent research in the clinical applications of MRI and/or spectroscopy and will have clinical teaching responsibilities. The faculty appointment will be within the Department of Radiology. Faculty rank is expected to be at the assistant professor level according to qualifications; salary and fringe benefits are competitive. Interested candidates should send a letter of interest with current curriculum vitae, statement of research and teaching interests, three letters of recommendation, and two copies of the candidate's most significant publications by 1 April 1990 to: **John A. Kirkpatrick, Jr., M.D., Radiologist-in-Chief, The Children's Hospital, Boston, 300 Longwood Avenue, Boston, MA 02115.** *The Children's Hospital, Boston, welcomes applications from minorities and women.*

PROJECT SCIENTIST MOLECULAR BIOLOGIST. Medical facility in northeastern Ohio researches and investigates the expression of oncogenes in mammalian cells, focusing especially on the tyrosine receptor kinase oncogene. Performs further research leading to the development of methods to neutralize various oncogenes within normal cell types. Analyzes the specificity of the action of oncogenes in normal cells. Uses established molecular biology techniques such as cloning, tissue cultures, immunoblotting, and immunoglobulin purification. Prepares and presents reports on scientific findings. Must possess specialized knowledge of the tyrosine receptor kinase oncogene, nucleotide sequence analysis, and the expression of oncogene proteins in eukaryotic systems and in *E. coli* (*Escherichia coli*), as evidenced by either work experience or published materials. Requires Ph.D. in biochemistry and 2 years of experience as a molecular biologist. Forty hours per week, 9:00 a.m. to 5:00 p.m., \$32,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **C. Bussard, JO #1084524, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**



WHEN 1,000 MINDS GET TOGETHER THE RESULTS ARE AMAZING.

One mind working alone rarely accomplishes as much as a team of top minds working together. Recognizing this, we at Syva seek the most qualified professionals who can apply their individual accomplishments and achieve more through the support of a talented team.

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Come to Syva, located in the San Francisco Bay area, and be part of our innovative team. You'll achieve amazing results. For more information about available positions, contact: Syva, Professional Staffing, Dept. SC9, P.O. Box 10058, Palo Alto, CA 94303.

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POSITIONS OPEN

PROJECT SCIENTIST. Medical facility in north-eastern Ohio researches the role of two potential cancer causing oncogene proteins, *ras* and *raf*, in the transduction of a growth signal from the outside of the cell into the cell nucleus, and investigates how the signal is transduced from the growth factor receptor to the *ras* and *raf* oncogene proteins. Uses the molecular biology techniques of microinjection; protein purification; lipid separation, identification, and preparation; immunoprecipitation; isotope handling; peptide synthesis; animal immunization; and affinity chromatography. Must possess specialized knowledge of *ras* oncogene protein as evidenced by work experience or scientific publications. Requires Ph.D. in Biochemistry and 1 year of experience as a project scientist. Forty hours per week, 9:00 a.m. to 5:00 p.m., \$34,996 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **C. Bussard, JO #1084521, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

TOXICOLOGISTS

The California Department of Food and Agriculture seeks staff toxicologists and associate toxicologists in its pesticide regulatory program. Incumbents will evaluate toxicology studies and/or conduct risk assessments. Positions exist for individuals with master's and/or doctorate degrees in toxicology, pharmacology, biochemistry, or a related field with suitable experience in animal toxicology. Salary range begins at \$4398 per month for staff toxicologists and \$3320 per month for associate toxicologists. Comprehensive benefits package. Continuous testing, oral exam required. Submit résumés to:

**Department of Food and Agriculture
Examinations Unit
1220 N Street, Room 154
Sacramento, CA 95814**

FELLOWSHIPS

POSTDOCTORAL FELLOW to study Ca^{2+} -dependent phospholipid binding proteins of the annexin/lipocortin family. Emphasis on biochemical and molecular-genetic approaches to elucidate the properties of these proteins and their interactions with cellular and artificial membranes. Send curriculum vitae and names and telephone numbers of references to: **Dr. Jonathan Tait, Department of Laboratory Medicine, SB-10, University of Washington, Seattle, WA 98195.**

POSTDOCTORAL RESEARCH ASSOCIATE MOLECULAR IMMUNOLOGY

A **FELLOWSHIP** position is available immediately to participate in studies of antigen structure-activity relationships, with a focus on T cell recognition of model and disease-associated antigens. Qualifications include a Ph.D. with a solid background in immunology and biochemistry. Additional strength in molecular genetics or virology would be an asset. Salary and benefits are competitive and excellent quality of life is afforded by the outstanding academic and community environment of Ann Arbor. Interested individuals should send curriculum vitae and the names of three references to: **Dr. Kemp B. Cease, Simpson Institute, Room 205, 102 Observatory Drive, University of Michigan Medical Center, Ann Arbor, MI 48109-0724.**

RESEARCH GRANTS AND FELLOWSHIPS

The American Epilepsy Society and the Epilepsy Foundation of America offer research grants and fellowships. For applications and guidelines, write:

**Epilepsy Foundation of America
Research Administration
4351 Garden City Drive
Landover, MD 20785
Telephone: 301-459-3700**

POSTDOCTORAL FELLOW(S). For research in growth regulation in normal human cells, atherosclerosis and immune regulation of growth factor production. Expertise in one or more of the following areas is desirable: cell culture, cellular/transplant immunology, molecular biology. Salary range \$20,000 to \$25,000 depending on experience. Send curriculum vitae and names of three references to: **Jeffrey D. Hosenpud, M.D., Division of Cardiology, Oregon Health Sciences University, Portland, OR 97201. Equal Opportunity Employer.**

MEETINGS



SEVENTH ANNUAL CONFERENCE

The Health Effects Institute's seventh annual conference, "Health Effects of Motor Vehicle Emissions: Fuels and Technologies," will be held in Scottsdale, Arizona, from 29 April to 2 May 1990. The purpose of this meeting is to foster communication among scientists, government officials, and motor vehicle industry representatives.

The meeting on Monday, 30 April, and Tuesday, 1 May 1990, will focus on the health effects of conventional fuel emissions, ozone and other oxidants, and methanol fuels and aldehydes. The program includes lectures by internationally recognized speakers, poster sessions with HEI investigators and invited presenters, and workshops on biological research.

On Wednesday, 2 May 1990, the closing symposium and panel discussion, "Impact of the New Clean Air Act and Choices for the Future," will bring together congressional, EPA, automotive, scientific, economic, and environmental representatives to examine the impact of the new legislation from several different perspectives.

Registration fee for the meeting is \$75. Participation is limited and by preregistration only. For further information contact:

**Health Effects Institute
215 First Street
Cambridge, MA 02142
Telephone: 617-491-2926**

SITUATIONS WANTED

CHEMIST/BIOCHEMIST/PHYSIOLOGICAL SCIENCES, Ph.D. Extensive teaching; experience in clinical biochemistry, cancer research, instrumentations. Prefer academic, government, hospital/research institute. **Box 354, Rochelle Park, NJ 07662.**

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.**

PROTEIN CHEMIST, Ph.D. Experienced project manager, background in collagen and extracellular matrix biochemistry, connective tissue pathology in diabetics, monoclonal antibodies. **Box 15, SCIENCE.**

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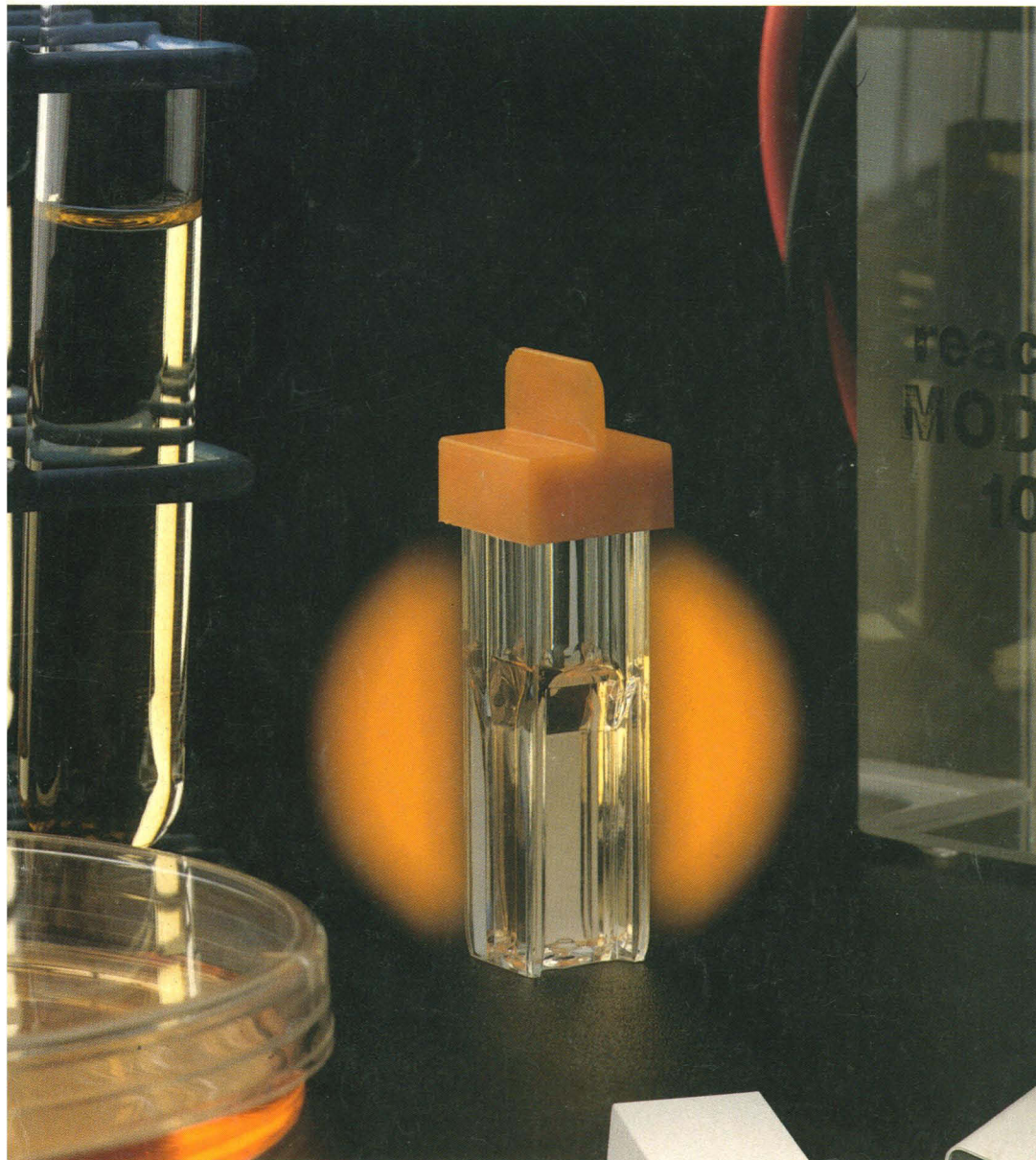


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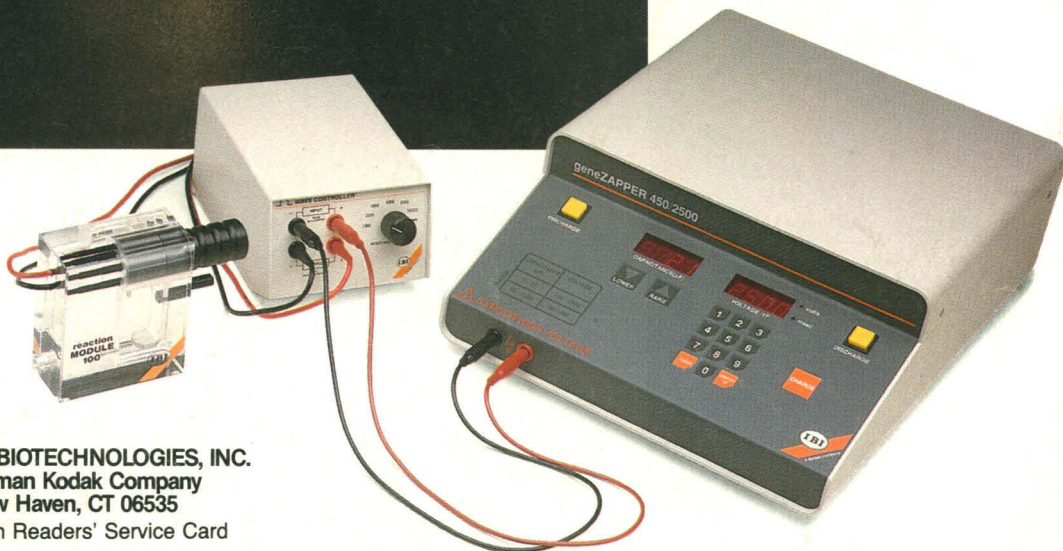


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