

Products & Materials

Monoclonal Antibodies

Mouse monoclonal antibody (MAb) to intracellular adhesion molecule (ICAM-1, CBL 450) is available as a purified preparation. Cymbus Bioscience. Circle 448.

MAbs to mouse annexins I, II, II (pII subunit), IV, and VI are available for researchers investigating calcium-dependent phospholipid-binding proteins. Annexins have been previously known by such names as lipocortin I, calpactin II, and chromonbindin 9. Each comes with a supply of annexin protein for use as a positive control in protein immunoblotting. Zymed Laboratories. Circle 449.

A MAb to placental alkaline phosphatase (PLAP) clone number NDOG2 detects the placental enzyme of PLAP and recognizes three common allelic forms of PLAP. Serotec. Circle 450.

New Version of Behavioral Research Software

Version 2.0 of The Observer updates this general-purpose software for event recording and data analysis in behavioral research. The Observer can now be used with any IBM-compatible computer to record the occurrence of events, and can be used to generate event-recording programs for a range of non-IBM-compatible computers, including portables. The software can turn a computer keyboard into a multichannel event recorder. Noldus Information Technology. Circle 451.

Whole Animal Mutagenesis Assay System

The Big Blue mouse mutagenesis assay system is the first system to combine the speed and ease of in vitro mutagenesis tests with the predictive power of longer and more costly in vivo bioassays. The system is designed to assess the germ line and somatic cell effects of chemical exposure. The system

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.

includes a bacteriophage lambda shuttle vector that has been integrated into the genome of inbred mice via microinjection. This vector contains a target gene for mutagenesis. After administration of the test compound to the mouse, the shuttle vector can be quickly recovered from genomic DNA isolated from any tissue of the mouse. This target DNA is then packaged into empty phage heads. Mutations can be identified by infecting host *Escherichia coli* with the packaged phage and plating on indicator agar containing a chromogenic substrate. A simple color reaction indicates the mutant frequency of the test compound. The system allows examination of the effects of chemical exposure to a whole animal, not just the selected cells of an in vitro system. Stratagene. Circle 452.

Mathematica 2.0

Mathematica 2.0 is an enhanced version of software for doing mathematics on computers. The number of functions the program performs has increased from 560 to 843, including the new function most often requested by current users—the ability to solve numerical differential equations. On Macintosh, NeXT, Sony, and Sun computers, the new version has sound capabilities. It is available for nearly 20 different computers, including 386-based MS-DOS systems, 386-based Microsoft Windows 3.0 systems, 386-based UNIX systems, CONVEX, Data General AViiON, Digital Equipment VAX and RISC, Hewlett-Packard/Apollo, IBM RISC System/6000, MIPS RISC Computer and RISCstation, and Silicon Graphics Personal IRIS and 4D series. Wolfram Research. Circle 453.

Pocket Microscope

The Lensman is a 200-power microscope small enough to fit in a pocket yet sophisticated enough to take high-resolution photographs. The monocular Lensman, which is held up to the eye, allows microscopic examinations to be carried out anywhere. It measures about 105 mm in diameter, is 27



mm thick, and weighs 250 g. Its built-in light source is powered by two AA batteries. The light can be applied overhead or at a 10° to 90° angle. With the PhotoLink accessory, microscopic photographs can be taken with any 35-mm single-lens reflex camera. A leather carrying case is also available. Inlet, Inc. Circle 454.

Bibliographic Software for IBM PCs

EndNote, a reference database and bibliography maker, is now available in a DOS version for IBM-compatible computers. The program stores bibliographic information and can generate bibliographies in many journal styles automatically. The user can type citations from the database into a paper, then EndNote will scan the finished paper for in-text citations and reformat them according to the desired journal style, adding a reference list at the end. The program includes a "hot key" that allows users of WordPerfect to access their database of references without leaving their word processor. It can hold up to 32,000 references and supports Greek characters, superscripts, and subscripts. Niles and Associates. Circle 455.

Literature

Queue Cryostar is a color information sheet that describes a cryogenic storage freezer capable of holding up to 8400 2-ml vials at uniform temperatures down to -150°C without the need for liquid nitrogen. Queue Systems. Circle 460.

HPLC Column Guide for Protein and Peptide Purification is a quick reference guide that outlines features of 56 columns, including general applications, typical sample loads, and flow rates. Bio-Rad Laboratories. Circle 461.

Tremetrics Model 850 Quadrupole Mass Spectrometer is an eight-page color brochure that describes an instrument for trace-level analysis of drugs and environmental samples. Tremetrics. Circle 462.

Guide to Aminex HPLC Columns for Biochemical Applications describes columns useful for monitoring cell metabolites, analyzing for specific biochemical compounds, and analyzing for radiolabeled compounds. The 30-page booklet guides the reader through selection and use of the columns. Bio-Rad Laboratories. Circle 463.

Direct Drive Vacuum Pumps presents 24 pages of such pumps, along with accessory fittings, filters, traps, and oil. Welch Vacuum Technology. Circle 464.

Personnel Placement

LINE CLASSIFIED ADVERTISEMENTS

DEADLINES: Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* publishes each Friday, except the last Friday of the year. Advertisements must be submitted in writing.

HOW TO SUBMIT A CLASSIFIED AD: Prepare double-spaced typewritten ad copy on a separate sheet. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Also include a cover sheet which gives name and phone number of contact person, desired date of publication, and billing information, including any special invoicing requests. Mail or FAX materials to:

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

CLASSIFICATIONS: *Science* publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired.

HOW TO CALCULATE RATE FOR CLASSIFIED AD: Ads are \$41 per line with a \$410 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces.

To ESTIMATE ad cost, count total number of 52 character lines and multiply by \$41 to find approximate cost of ad per week. Each line of centered heading counts as one line. Also count one line for white space between headline and first line of text; all partial lines are also counted as full lines (including all centered reply information).

Remember, this is a rough estimate only. Allow for variation between estimated typewritten lines and ads when actually typeset for magazine. Therefore, purchase orders must allow additional funds for flexibility and/or adjustment. *Science* cannot provide proofs of typeset ads.

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

CREDIT CARDS: *Science* accepts MasterCard and VISA. Both personal and corporate cards may be used. Prepayment does not apply to credit cards.

BOXES AND LOGOS: Any line classified ad can be boxed and/or published with logo to increase its visibility on page. Since the box takes up additional space, one line now equals 48 characters and spaces; two additional lines will be added to allow for top and bottom rules. Logos are billed according to the number of lines they take on the page.

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

DISPLAY PERSONNEL ADVERTISEMENTS

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

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

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it and to decline classifications which it considers misleading.

POSITIONS OPEN

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

Applications are invited for a tenure-track appointment as **ASSISTANT PROFESSOR OF SURGERY** within the Department of Surgery/Division of Immunology and Organ Transplant. This American Board of Surgery-qualified surgeon will have successfully completed a 2-year fellowship in transplantation. Laboratory experience: at least 1 year in immunogenetics as well as cardiac and renal transplants in rats is required.

Submit application, including curriculum vitae and letters of recommendation, no later than 1 May 1991 to: **Barry D. Kahan, Ph.D., M.D., University of Texas Health Science Center at Houston, 6431 Fannin, Suite 6240, Houston, TX 77030. The University of Texas Health Science Center is an Equal Opportunity Employer. Women and minorities are encouraged to apply.**

ASSISTANT PROFESSOR

The Department of Microbiology, University of New Mexico School of Medicine, seeks applicants for a tenure-track position at the assistant professor level. Applicants should have demonstrated research experience in molecular or cell biology with a focus on cells of the immune system and interest in participating in an interdepartmental graduate program in immunology. Responsibilities include research and teaching in the medical and graduate programs of the School of Medicine. Qualifications include a Ph.D., M.D., or equivalent degree and a strong record of postdoctoral research accomplishment. Submit curriculum vitae and names of three references by 20 June 1991 to: **Dr. Ellen H. Goldberg, Chairman, Department of Microbiology, University of New Mexico, School of Medicine, Albuquerque, NM 87131. Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR VERTEBRATE BIOLOGY

Search continued. Tenure-track position available starting September 1991. Hollins College, a private 4-year liberal arts college for women, seeks a vertebrate biologist to teach undergraduate courses in general biology, comparative anatomy, embryology, and histology. Teaching load is two courses per semester. Experience in scanning EM is desirable. Accepted candidate is expected to develop a research program involving undergraduate students. Ph.D. required. Curriculum vitae, statement of teaching and research interest and experience, transcript, copies of significant publications, and three letters of recommendation should be sent to: **Dr. Harriet Gray, Chair, Department of Biology, Hollins College, P.O. Box 9616, Roanoke, VA 24020 by 1 May 1991. Equal Opportunity Employer.**

STANFORD UNIVERSITY DEPARTMENT OF ANESTHESIA

Applications are invited for a position as a **RESEARCH ASSISTANT PROFESSOR** of neurophysiology in the Department of Anesthesia. This position does not lead to tenure. Credentials should include a Ph.D. and at least 3 years of postdoctoral experience in peripheral sensory physiology, as well as CNS synaptic neurophysiology and pharmacology. Prior research in anesthesia mechanisms is desirable. The appointee will be expected to develop or maintain a funded research program of high quality and to participate in teaching graduate students and fellows. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Interested candidates should submit curriculum vitae, a summary of potential research projects, and the names of three referees to:

H. Barrie Fairley, M.B., B.S.
Professor and Chairman
Department of Anesthesia
Stanford University School of Medicine
Stanford, CA 94305-5117

POSITIONS OPEN



Washington

WASHINGTON UNIVERSITY IN ST. LOUIS

TENURE-TRACK ASSISTANT PROFESSOR MOLECULAR BIOLOGY AND PHARMACOLOGY

Washington University School of Medicine is recruiting an individual at the level of assistant professor in the tenure track. Outstanding scientists working within the broad area of molecular biology will be considered with an emphasis on those who have a strong background in mammalian genetics and who are expert at using transgenic mice to examine fundamental questions in gene regulation. Interested applicants should forward curriculum vitae, a short summary of research plans, and the names and addresses of three references to: **Search Committee, c/o Jeffrey Gordon, Head, Department of Molecular Biology and Pharmacology, Box 8103, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. Washington University is an Affirmative Action/Equal Opportunity Employer.**

SYSTEMS NEUROSCIENTIST AT UNIVERSITY OF PENNSYLVANIA

The David Mahoney Institute of Neurological Sciences (INS) of the University of Pennsylvania invites applications for a tenure-track position in systems neurobiology. This appointment will be at the level of **ASSISTANT PROFESSOR**. We are most concerned to find a neuroscientist working at the TISSUE level, and we hope with this appointment to strengthen the already substantial representation on campus of research on vision and learning development. Candidates should (by 1 June 1991) send curriculum vitae, a statement of current research interests, and the names of three individuals willing to provide letters of evaluation to: **Professor Peter Sterling, Systems Neuroscience Search, Department of Anatomy, University of Pennsylvania, Philadelphia, PA 19104-6058. Equal Opportunity/Affirmative Action Employer.**

QUEEN'S UNIVERSITY DEPARTMENT OF ANATOMY

Applications are invited for a special appointment as an **ASSISTANT PROFESSOR OF ANATOMY** which is contingent on the applicant obtaining a Medical Research Council or equivalent scholarship. A Ph.D. and/or M.D. or D.D.S. degree and a minimum of 2 years of postdoctoral experience are essential. The department is located in new facilities in a Basic Medical Sciences Building. Outstanding candidates with strong research programs in cell biology, neuroscience, human biomechanics, or in other related areas will be considered. Ability to teach in two of the three areas: human gross anatomy, neuroscience, or embryology, in an integrated curriculum will be an asset. Candidates should arrange to have a copy of their curriculum vitae and three letters of recommendation sent to: **Dr. M. G. Joneja, Professor and Head, Department of Anatomy, Faculty of Medicine, Queen's University, Kingston, Ontario Canada K7L 3N6. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Queen's University has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal peoples, people with disabilities, and visible minorities.** Deadline for receipt of applications and letters of recommendation is 10 May 1991.

VISITING SCIENTIST (ASSISTANT PROFESSOR level) in prokaryotic molecular genetics. Requirements for this 2-year position include Ph.D. or M.D. and 3 years of demonstrably productive postdoctoral experience in bacterial genetics, gene fusion, cloning and analysis of DNA, and related skills. Successful candidate will collaborate in studies on the genetic control of enteric bacterial responses to host antimicrobial proteins. Stipend is highly competitive. Forward curriculum vitae and the names and addresses of three references to: **John K. Spitznagel, M.D., Professor and Chairman, Microbiology and Immunology, Emory University, Atlanta, GA 30322.**

Emory University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGY: ASSISTANT PROFESSOR. Full-time tenure-track, starting 12 August 1991. Earned doctorate in biological sciences required. Strong background in developmental biology. Emphasis in plant sciences desirable. College teaching experience preferred. Teaching responsibilities to include general biology, with potential for future upper level developmental biology and plant science courses. A modest research program appropriate to a primarily teaching institution is expected and supported. Salary competitive. The campus is located in a suburban setting 8 miles south of Lake Michigan and 65 miles east of Chicago. Review of applications to begin 22 April 1991. Send letter of application, curriculum vitae, transcripts, and three letters of reference to: **Mrs. Diane M. Carpenter, Academic Operations Assistant, Purdue University North Central, 1401 South U.S. 421, Westville, IN 46391.** Application acknowledgement letter provided. *Women and minorities encouraged to apply. An Equal Access/Equal Opportunity Employer.*

ASSISTANT PROFESSOR ANATOMY/NEUROBIOLOGY

Applicants are invited for a tenure-track position in the Department of Anatomy and Cell Biology, University of North Dakota School of Medicine. Applicants must have a Ph.D., M.D. or equivalent with at least 2 years of postdoctoral training and research experience in neurobiology, cell biology, or related areas. The successful applicant will be expected to carry on a vigorous extramurally funded research program in his/her respective field. Applicants should be willing to assist in teaching an interdepartmental neuroscience course for medical students and to contribute to teaching in an undergraduate paramedical anatomy course. The successful candidate will also be expected to make a substantial contribution to the departmental graduate program. Review of applications will begin 15 May 1991, and continue until the position is filled. Send curriculum vitae, descriptions of research and teaching experience, and three letters of reference to: **Dr. Edward C. Carlson, Chairman, Department of Anatomy and Cell Biology, University of North Dakota School of Medicine, Grand Forks, ND 58202.** *The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

SIGNAL TRANSDUCTION

SCIENTIST. The Hospital for Sick Children Research Institute invites applications for scientist position (tenure track) with a group studying ion transport. Experience in signal transduction and/or molecular biology desired. Potential cross-appointment to the University of Toronto (**ASSISTANT/ASSOCIATE PROFESSOR**). Position available 1 July 1992. Please forward curriculum vitae, names/addresses of three references, and future research plans to: **Dr. H. O'Broovich, Director Respiratory Research, Hospital for Sick Children, 555 University Avenue, Toronto, Ontario M5G 1X8, Canada.** Deadline: 15 May 1991.

CELL BIOLOGIST

The Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology, College of Veterinary Medicine, Washington State University, invites applications or nominations for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The duties of the position include: the development of a vigorous, independent research program employing modern methods of cell and/or molecular biology; involvement in graduate training; and participation in teaching veterinary cell biology, developmental biology, and/or microscopic anatomy to D.V.M. students. Areas of research in the department include neurobiology, reproductive endocrinology, hemostasis, exercise, and cardiovascular physiology. Qualifications: Ph.D. and appropriate research and teaching experience. Rank and salary will be commensurate with qualifications. Earliest starting date is 1 September 1991.

Written applications must include curriculum vitae and the names, addresses, and telephone numbers of three references. Applications, nominations, or inquiries should be sent to: **Dr. J. W. Harding, Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology, College of Veterinary Medicine, Washington State University, Pullman, WA 99164-6520.** Review of applications will begin 1 July 1991, and will continue until the position is filled.

Washington State University is an Affirmative Action/Equal Opportunity Educator and Employer.

POSITIONS OPEN

TRANSPLANTATION IMMUNOLOGIST LOYOLA UNIVERSITY OF CHICAGO

The Loyola University of Chicago cardiac transplantation program has an immediate opening for an immunologist to establish a high quality basic research program in transplantation immunology. A tenure track will be granted in the Departments of Medicine and Microbiology and Immunology at the **ASSISTANT OR ASSOCIATE PROFESSOR** levels. Candidates should have a Ph.D. and a record of established research in the areas of allograft rejection, transplantation tolerance, and/or allograft vascular disease. Candidates must be willing to participate in graduate and medical students teaching. While the successful candidate is expected to obtain extramural funding, the salary is not dependent from grant funds. Please submit curriculum vitae, two copies of relevant papers, description of research goals, and three supporting letters to:

Maria Rosa Costanzo-Nordin, M.D.
Medical Director
Cardiac Transplant Program
Loyola University of Chicago
Maywood, IL 60153

The Department of Surgery at Stanford University School of Medicine is conducting a search for an experienced academic leader in gastrointestinal surgery to head the Division of GI Surgery. Candidates should be experienced academic surgeons with an appropriate record of clinical and laboratory research. The level of appointment will be at the **ASSISTANT PROFESSOR OR PROFESSOR** rank based on the candidate's qualifications. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Interested applicants should write to: **Chairman, Department of Surgery, MSOB Room X-228, Stanford University School of Medicine, Stanford, CA 94305.**

ASSOCIATE PROFESSOR. Biochemistry, cell/molecular biology; Ph.D. tenure track in new department. Generous start-up funds, space, and salary. Priority accorded candidates with demonstrated research skills and extramural funding. Submit curriculum vitae, research interests, references to: **David V. Cohn, Ph.D., Health Sciences Center, University of Louisville, Louisville, KY 40292.** *Equal Opportunity/Affirmative Action Employer.*

The Department of Surgery at Stanford University School of Medicine is conducting a search for an experienced academic leader in organ transplantation to head the Division of Transplantation. Candidates should be experienced in renal transplantation and liver transplantation and should be actively engaged in transplant-related research. The level of appointment will be at the **ASSOCIATE PROFESSOR OR PROFESSOR** rank based on the candidate's qualifications. The department and transplant division also seek applications for two junior faculty at **ASSISTANT OR ASSOCIATE PROFESSOR** rank. Candidates for these positions should have completed fellowship training in noncardiac organ transplantation and have demonstrated laboratory research experience in a related field. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Interested applicants should write to: **Chairman, Department of Surgery, MSOB Room X-228, Stanford University School of Medicine, Stanford, CA 94305.**

DIRECTOR, REGENSTRIEF INSTITUTE FOR HEALTH CARE. Indiana University and the Regenstrief Foundation seek candidates for the position of director of the Regenstrief Institute for Health Care. M.D. and/or Ph.D. required as is the ability to administer a major health care delivery institute involved in information science research, clinical epidemiology, clinical practice analysis and decision-making, and health services research. The successful candidate will be appointed to the faculty of the Indiana University School of Medicine. Tenure status will be commensurate with interests and experience. Interested candidates should send curriculum vitae and references to: **C. Conrad Johnston, M.D., Chairman, Search and Screen Committee, Indiana University School of Medicine, Fesler Hall 302, 1120 South Drive, Indianapolis, IN 46202-5114.** *Indiana University and the Regenstrief Institute are Affirmative Action/Equal Opportunity Employers, M/F.*

POSITIONS OPEN

The Peter J. Shields **ENDOWED CHAIR** of Dairy Food Science in the Department of Food Science and Technology and Agricultural Experiment Station of the University of California, Davis, will be vacant on 1 July 1991. The holder of this chair is also a senior tenured faculty member in the department and is expected to have a high international reputation. For full details of the position and the application procedures, contact: **Professor David S. Reid, Department of Food Science and Technology, University of California, Davis, CA 95616.** Applications will be due 31 May 1991. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

CHAIRPERSON DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY LOUISIANA STATE UNIVERSITY MEDICAL CENTER, SHREVEPORT

Applications and nominations are invited for the position of **PROFESSOR AND HEAD** (chairperson) of the Department of Biochemistry and Molecular Biology at Louisiana State University Medical Center (LSUMC), Shreveport. The department currently consists of nine faculty, eight fellows, and 23 doctoral students and is responsible for teaching freshman medical students, maintaining state-of-the-art research programs in molecular biology, and training doctoral students. The department is well equipped, well funded, and will expand now and with the opening of the ten-story Biomedical Research Institute which will focus on research in molecular biology, cardiovascular sciences, and neurobiology. We seek candidates with an outstanding record of research achievement, proven leadership skills, and a commitment to training medical and doctoral students. Candidates should have a Ph.D. and/or M.D. and a record of scientific excellence as evidenced by publications and grant awards. Candidates should submit curriculum vitae, a summary of research interests, and at least three letters of reference to: **Dr. Dennis J. O'Callaghan, Chair of Search Committee, Department of Microbiology and Immunology, LSUMC, 1501 Kings Highway, Shreveport, LA 71130.**

LSUMS is an Equal Opportunity/Affirmative Action Employer.

The Truman Memorial Veterans Hospital, a Dean's Committee Hospital affiliated with the University of Missouri Health Sciences Center in Columbia, Missouri, is seeking an **ASSOCIATE CHIEF OF STAFF FOR RESEARCH AND DEVELOPMENT.** The position will be responsible for directing the hospital's research program and assisting M.D. and Ph.D. investigators in grant preparation. Administrative responsibility would occupy 20% of incumbent's scheduled time with the balance spent in the candidate's own research, teaching, and clinical program. Candidates must have an M.D. or Ph.D. degree, a solid publication record, a demonstrated record of excellence in research, and be committed to sustaining an active research program. Please submit curriculum vitae, statement of research interests, and names and addresses of three or more references by close of business 12 May 1991 to: **Chairman, Search Committee ACOS/R&D (151), VA Hospital, 800 Hospital Drive, Columbia, MO 65201.** *Equal Opportunity Employer.*

COORDINATOR FOR SCIENCE OUTREACH. A full-time Ph.D. biologist is sought to coordinate and participate in the Science Outreach program of Washington University in St. Louis. This person will help develop and teach in one or two lecture/laboratory courses offered annually for high school teachers in the areas of molecular biology, cell biology, genetics, developmental biology, or evolution/ecology; will provide continuing advice to teachers participating in these courses; will direct the Washington University/University City Partnership with secondary school science teachers; and will help prepare grant applications to support these activities. The work will provide opportunities to coauthor and publish new instructional materials. To apply, send a letter indicating interest in this position and curriculum vitae and arrange to have three letters of reference sent to: **Professor Roy Curtiss III, Chairman, Department of Biology, Campus Box 1137, One Brookings Drive, Washington University, St. Louis, MO 63130.** *Washington University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

CHIEF, DIVISION OF NEPHROLOGY DEPARTMENT OF INTERNAL MEDICINE UNIVERSITY OF TEXAS MEDICAL BRANCH GALVESTON, TEXAS 77550

The University of Texas Medical Branch invites applications for the position of chief of the Division of Nephrology in the Department of Internal Medicine. The Department of Medicine is committed to the development of strong academic programs under the leadership of Dr. Don Powell, recently named department chair. Candidates must have an established record of academic leadership and scholarly accomplishment. The position offers an excellent opportunity to expand and further develop a broad-based clinical, research (basic and clinical) and teaching program.

Applications should include curriculum vitae. Address all correspondence to: **Chair of the Search Committee for Nephrology, Akhil Bidani, Ph.D., M.D., Chief, Pulmonary Division, The University of Texas Medical Branch, E-61, Galveston, TX 77550.**

The University of Texas Medical Branch (UTMB) is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.

ASSOCIATE DIRECTOR INTERPRETIVE SERVICES NATIONAL ZOOLOGICAL PARK SMITHSONIAN INSTITUTION GM-1001-15, \$61,643 to \$80,183 PER ANNUM

Supervises the Zoo's Offices of Exhibit Interpretation, Education, Public Affairs, and Development. One of four associate directors reporting to the director. Experience is required in management and programmatic innovation in public education, exhibition interpretation, and public relations in a zoo, museum, aquarium, or botanic garden, or in a scientific environment. Knowledge of organismic biology and other sciences or associated disciplines sufficient for the transformation from Zoo to BioPark is desired. For more information, contact: **Office of Human Resources, Smithsonian Institution, Branch 3, P.O. Box 23294, Washington, DC 20006 (202-287-3100, ext. 246) or Office of Management Services, National Zoological Park, Washington, DC 20008 (202-673-4720).** Application for federal employment (SF-171) must be received by 20 May 1991. *The Smithsonian Institution is an Equal Opportunity Employer.*

FIELD ARBITRATORS, THIRD PARTIES NEEDED

Senior, or retired, medical academics, Ph.D.'s, M.D.'s, D.V.M.'s needed in the field to act as independent third parties, arbitrators of disputes involving staff members, student and staff, departments, and the ACUC. Confidential and fully insured. Inquiries welcome. Please submit brief curriculum vitae and per diem requirements to: **BioMed Consulting Services, Inc., 5788 Wide Waters Parkway, DeWitt, NY 13214. FAX: 315-445-1058.**

VETERINARY MICROBIOLOGIST. The Department of Veterinary Microbiology and Pathology at Washington State University (WSU), invites applications for a full-time **TENURE-TRACK POSITION** in veterinary microbiology (bacteriology or mycology). The position offers 50% time for research, and the successful candidate will be expected to develop independent and collaborative extramurally supported research programs in infectious diseases. In addition the position has 50% time for teaching, with existing faculty, veterinary bacteriology to veterinary students and graduate level teaching in mechanisms of infectious diseases. D.V.M. (or equivalent) and Ph.D. degrees are required. Certification by the American College of Veterinary Microbiologists is desired, and intention to pursue certification is required. Commitment to progressive teaching is required. Rank and salary will be commensurate with training and experience. Final screening will begin 3 June 1991, and will continue until the position is filled. Position begins fall 1991. In order to receive consideration for this position, applicants should submit curriculum vitae and names and addresses of three references to: **Guy H. Palmer, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, WA 99164-7040** by 3 June 1991. *WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Members of ethnic minorities, women, Vietnam-era or disabled veterans, persons of disability, and/or persons between the ages of 40 through 70 are encouraged to apply.*

ASSISTANT DIRECTOR Center for Astrophysical Research in Antarctica THE UNIVERSITY OF CHICAGO

The Center for Astrophysical Research in Antarctica (CARA) is seeking an Assistant Director. Located at The University of Chicago's Yerkes Observatory in Williams Bay, Wisconsin, CARA is a Science and Technology Center, recently funded by the National Science Foundation. Its purpose is to study the formation of the Universe, galaxies and stars using infrared, submillimeter, and millimeter-wavelength telescopes which will be deployed at the South Pole, taking advantage of the extremely cold and dry conditions on the Antarctic Plateau.

Reporting to the Director, the Assistant Director will participate in the planning and execution of both the research and non-research activities of the Center. Other responsibilities include the supervision of Center staff, preparation of short and long-term management plans, Center activity scheduling, supervision of all administrative functions (including financial), coordination of Center-wide activities (including educational programs, technology outreach, public information and corporate relations), supervision and the preparation of Center proposals, reports and publications, and organization of Center meetings and workshops.

This position requires a PhD in a physical or engineering science (physics or astronomy is desired), including experience in the management of a large scientific enterprise, as well as a broad interest in the research, educational and outreach activities of the Center. Applicants should send a resume and names of at least three references by May 31, 1991 to:

**D.A. Harper, Director
Center for Astrophysical Research in Antarctica
c/o ADIR
Yerkes Observatory
Williams Bay, WI 53191-0258
(414) 245-5555 Fax: (414) 245-9805**

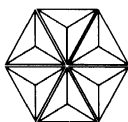
An Affirmative Action Equal Opportunity Employer

RESEARCH INVESTIGATOR - CADD

Bristol-Myers Squibb, a worldwide leader in the development and marketing of sophisticated pharmaceutical, medical care, consumer and nutritional products, has an exceptional opportunity for a Research Investigator in Chemistry Core Resources at the Pharmaceutical Research Institute in Wallingford, Connecticut.

This position in Computer Aided Drug Design (CADD) requires close interaction with medicinal chemists to assist them in choosing synthetic targets with the use of modeling techniques. Qualified candidates will be well versed in computational chemistry techniques such as Quantum Chemistry, Molecular Simulation, QSAR, etc., have a PhD (1-2 years Post doctoral experience preferred) in Physical Chemistry, Theoretical Chemistry or Biophysics.

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University Department of Molecular and Cellular Biology

ENDOWED CHAIR IN GENETICS

The University Department of Molecular and Cellular Biology at The University of Arizona is searching for a distinguished scientist for the Lindholm Chair in Genetics which was established as a permanent memorial to George and Sally Lindholm. We wish to attract an internationally recognized scholar and educator in the field of vertebrate molecular genetics. Nominees are expected to establish an outstanding research program and act as a catalyst in the further development of academic programs in Genetics. The recipient of the chair will receive substantial start-up funds and annual support for research from the endowment.

We will begin to review applications on May 10, 1991, although applications will be accepted until the position is filled. Applications should include a letter describing current and future research and teaching interests, a curriculum vitae, and names, addresses, and phone numbers of three professional references. Nominations should include a letter supported with an abbreviated curriculum vitae of the nominee. Applications and nominations should be sent to: Search Committee for the Lindholm Chair, University Department of Molecular and Cellular Biology, Life Sciences South 444, The University of Arizona, Tucson, AZ 85721, USA. The University of Arizona is an Equal Opportunity Affirmative Action Employer. Women and minorities are encouraged to apply.



**THOMAS JEFFERSON
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Carlo M. Croce, M.D., Director

FACULTY POSITIONS IN IMMUNOLOGY. Several faculty appointments are currently available in the recently expanded Department of Microbiology and Immunology. We invite applications from new and established investigators for full time tenure-track positions at any academic rank. Individuals with strong research interests in any area of immunology will be considered. Investigators with research programs in Molecular Immunology are particularly encouraged to apply. The Department currently has research interests in transplantation immunology, autoimmunity, immunogenetics, cell-cell interactions, neuroimmunology, immunoparasitology, tumor immunology, cytokines, and immunoregulation. The research environment is excellent and conducive for active interactions within the Department and with other members of the Jefferson Cancer Institute. The University itself is located in the vibrant historical downtown area of Philadelphia. Please send curriculum vitae, research plans, and the names and addresses of three references to:

Dr. Robert Korngold
Department of
Microbiology and Immunology
Jefferson Medical College
1020 Locust Street
Philadelphia, PA 19107-6799

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Virology Division Medical Research Fellow

Position #62582-5

The Virology Division has an opening for a Medical Research Fellow to develop and implement techniques used to analyze drug sensitivity of clinical HIV samples. The selected candidate will also develop and implement new methodology for studying HIV replication and development of resistance, and investigate the mechanism of drug resistance in HIV.

The position requires a MD degree. Two years laboratory experience utilizing a variety of virological techniques is preferred.

Medical Research Fellows are initially appointed for up to 1 year with renewal for a second year upon the mutual agreement of the employee and Burroughs Wellcome Co.

Burroughs Wellcome Co. offers top benefit programs along with very competitive salaries. If you are interested in working with us, submit your resume, indicating position number in your cover letter, by **May 31, 1991** to: **Burroughs Wellcome Co., Recruiting and Staffing, Pos. #62582-5, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

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POSITIONS OPEN

SENIOR-LEVEL FACULTY POSITION CELLULAR/MOLECULAR NEUROBIOLOGY

The Department of Biological Sciences and the Program in Neural, Informational, and Behavioral Sciences (NIBS) invite applications for a tenured faculty position (**ASSOCIATE/FULL PROFESSOR**). Preference will be given to individuals using modern cell biological or molecular methods to study neuronal function, development, or plasticity. Candidates will be expected to have substantial research programs and to participate in graduate and undergraduate teaching. Excellent space will be provided in a newly completed neuroscience building. The successful candidate will be a member of the Section of Neurobiology, a vigorous group of 21 faculty, and the NIBS program, a large multidisciplinary group of molecular, cellular, systems, behavioral, cognitive, and computational neuroscientists. Please submit by 15 May 1991 curriculum vitae, statement of research interests, and the names of three references to: **Neurobiology Search Committee, Section of Neurobiology, University of Southern California, Los Angeles, CA 90089-2520. Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Physiology and Biophysics invites applications for a faculty position at the **ASSISTANT PROFESSOR** (tenure track) level commencing as early as September 1991. We are seeking candidates with the ability to define a significant research area in eukaryotic cell physiology, using modern techniques of cell biology, molecular biology, biochemistry, or biophysics. Examples of research interests would include cell signaling, differentiation and growth control, regulation of gene expression, intracellular processing and sorting of biomolecules, membrane formation and turnover, and the relationship of molecular structure to biological function. The position also involves teaching of medical and graduate students. We will begin considering applications starting 1 June 1991. Send curriculum vitae, a brief research description, and the names of three referees to: **Michael D. Cahalan, Chairman, Department of Physiology and Biophysics, University of California, Irvine, CA 92717.**

The University of California, Irvine, is an Affirmative Action/Equal Opportunity Employer.

COMPARATIVE PHYSIOLOGIST. Department of Biology seeks candidates for 1-year position, September 1991, with possibility of a second year. To teach comparative animal physiology and an additional course, participate in team-taught introductory course, and direct undergraduate student research. Send curriculum vitae including research interests, and three letters of reference to: **Patsy Dickinson, Department of Biology, Bowdoin College, Brunswick, ME 04011 by 1 May 1991. Bowdoin College is committed to Equal Opportunity through Affirmative Action.**

FACULTY POSITIONS IN NEUROBIOLOGY THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER

The University of Texas Southwestern Medical Center at Dallas is establishing a Neuroscience Program, which will be housed in new research buildings now under construction. The Department of Cell Biology and Neuroscience seeks applications for nine tenure-track positions at the level of **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR**. Applicants must have a relevant Ph.D. or M.D. degree and at least 2 years of appropriate postdoctoral training, and show evidence of a firm commitment to a career in independent research. We are particularly interested in considering individuals who wish to apply the techniques of biochemistry, biophysics, electrophysiology, genetics, or molecular biology to fundamental problems in cellular neurobiology. Responsibilities will also include teaching of medical and graduate students after the first year of employment. An applicant should send curriculum vitae, a brief description of proposed research, and either a list of references or three letters of references to:

**Neuroscience Search Committee
Department of Cell Biology and Neuroscience
University of Texas Southwestern Medical Center
5323 Harry Hines Boulevard
Dallas, TX 75235-9039**

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POSITIONS OPEN

CELL BIOLOGY FACULTY POSITIONS. The Department of Cell Biology and Anatomy invites applications from individuals with strong research programs in molecular aspects of cellular or developmental biology. Faculty rank will be determined by experience. Teaching will be in medical or graduate cell biology, histology, or genetics. Submit applications with curriculum vitae, summary of research interests, and names of references to: **Cell Biology Search, Department of Cell Biology and Anatomy, Johns Hopkins Medical School, 725 North Wolfe Street, Baltimore, MD 21205. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.**

PEPPERDINE UNIVERSITY

FACULTY POSITION. Animal cell biology or animal physiology. Applications are invited for a two-semester, nontenure-track position to begin in late August of 1991. Subject to budgetary considerations, the appointment may be extended to 12 months and may be converted to a full-time, tenure-track position in 1992. The visiting appointment may be made at either the junior or senior level. The successful candidate will teach lecture/laboratory courses in biology for nonmajors and a course for majors in his/her area of expertise. The Ph.D. and a commitment to undergraduate teaching are required. The department operates a strong program of research for undergraduates, and the candidate should be capable of directing undergraduate students in independent research projects. Pepperdine is an independent Christian university under the control of a self-perpetuating Board of Regents and is related to the Churches of Christ. Submit letter of application containing a statement of teaching philosophy, names and addresses of three references, and curriculum vitae to: **Dr. Bennett Hutchinson, Natural Science Division, Pepperdine University, Malibu, CA 90263. An Equal Opportunity Employer.**

MASS SPECTROSCOPIST

The Division of Clinical Pharmacology, The Johns Hopkins University, has an immediate opening for a mass spectroscopist at the **FACULTY LEVEL** in the Clinical Research Center Core Mass Spectrometry Laboratory. The laboratory will be involved in quantitative studies of the metabolism of nucleoside analogues and other compounds being tested for efficacy in the treatment of acquired immune deficiency syndrome. Applicants should have experience in quantitative mass spectrometry using GC/MS and LC/MS, including sample preparation, purification, and derivatization techniques. The facility is equipped with a triple quadrupole GC/LC/MS/MS instrument with thermospray interface. Access to the resources of The Middle Atlantic Mass Spectrometry Center and collaboration with Dr. Robert Cotter are possible as well. Experience in the mass spectral analysis of nucleosides and nucleotide metabolites is desirable. Applicants should contact: **Dr. Paul Lietman, The Johns Hopkins University School of Medicine, Osler 527, 600 North Wolfe Street, Baltimore, MD 21205.**

MOLECULAR GENETICIST PSYCHOPHARMACOLOGIST

Mayo Clinic/Mayo Medical School invites applicants for a **FACULTY POSITION** in the Department of Psychiatry and Psychology, in close collaboration with members in the Department of Pharmacology and/or the Department of Biochemistry and Molecular Biology. Candidates should have primary interests in major psychiatric disorders and be pursuing these interests with the methods of molecular genetics and/or molecular pharmacology. M.D. and clinical training in psychiatry are desirable but not required. Mayo will provide generous space and start-up funds in addition to an attractive package of salary and benefits. Academic rank will be determined by qualifications; established investigators are also encouraged to apply. Submit curriculum vitae with names and addresses of three or more references to: **Toshihiko Maruta, M.D., Chairperson of Search Committee, Department of Psychiatry and Psychology, Mayo Medical School, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Employer.**

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POSITIONS OPEN

The Department of Obstetrics and Gynecology at the University of Tennessee College of Medicine is actively recruiting a full-time **PERINATOLOGIST** for its Division of Maternal/Fetal Medicine. The teaching hospital serves as the Tertiary Care Center for 80 counties in West Tennessee, East Arkansas, North Mississippi, Southern Missouri, and a part of Kentucky; an area with approximately 40,000 deliveries per year. About 50% of the pregnancies delivered at the center are high risk pregnancies. Perinatal services each year include over 20,000 outpatient visits, 7,800 deliveries, and over 1,400 patients seen in reproductive genetics. Excellent opportunity to participate in teaching in a Board-approved fellowship program and collaborate in ongoing research in clinical perinatology, critical care in obstetrics, ultrasound and prenatal diagnosis. Board eligibility/certification in maternal/fetal medicine is required. Increased candidates should send curriculum vitae to:

**Baha M. Sibai, M.D.
Division of Maternal/Fetal Medicine
University of Tennessee, Memphis
853 Jefferson Avenue, Room E-102
Memphis, TN 38103
Telephone: 901-528-5660**

The University of Tennessee, Memphis, is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer/ADA Employer.

EASTERN NEW MEXICO UNIVERSITY ROSWell (ENMU)

PHYSICAL SCIENCE INSTRUCTOR. Nine-month, tenure-track position beginning fall 1991. A master's degree in a physical science and 3 years of postsecondary or secondary teaching experience is required. Salary range for 9 months is \$20,776 to \$24,892 (based on 1990-91 schedule). To apply: send a letter of application, résumé, complete transcripts, and three professional references to: **Personnel Office, ENMU-Roswell, P.O. Box 6000, Roswell, NM 88202. Deadline for application is 7:00 p.m. 17 May 1991. ENMU is an Equal Opportunity/Affirmative Action Employer.**

The Département de sciences biologiques, Faculté des arts et des sciences, Université de Montréal, invites applications for a **TENURE-TRACK POSITION** in mammalogy, with a specialization in wildlife management ecology. Functions: the successful candidate will be expected to teach courses, in French, at the undergraduate and graduate levels, to supervise graduate students, and to carry out an active research program. Preference will be given to candidates who would be able to use the facilities of the Station de biologie des Laurentides. Requirements: candidates should have a Ph.D. in a relevant field, and postdoctoral or equivalent experience. A working knowledge of French, or willingness to learn, is essential. Salary: the salary is based on current contract agreements. Appointment data: 1 September 1991. Interested applicants should submit curriculum vitae, two copies of five representative reprints or preprints, and three letters of reference before 15 May 1991 to: **M. Raymond McNeil, directeur, Département de sciences biologiques, Université de Montréal, C.P. 6128, succursale A, Montréal, Québec H3C 3J7, Canada. According to Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents (0358).**

TEACHING POSITION, ECOLOGIST. The Department of Biology, Emory University, invites applications for a teaching position at the **ASSISTANT PROFESSOR** rank for a nontenure-track, 1-year term beginning in September 1991, with a possibility of renewal for up to 3 years. The successful applicant should have primary training in community or ecosystem ecology, and must present evidence of high quality teaching. Responsibilities will include teaching courses in introductory ecology and environmental science, serving as adviser to students in an interdisciplinary ecology program, and teaching more advanced courses, possibly including a graduate course. The candidates may become involved in supervising undergraduates in independent research. Send curriculum vitae, a statement on your experience and interests in teaching, and have three letters of recommendation sent to: **Dr. Larimore Ragsdale, Department of Biology, Emory University, Atlanta, GA 30322. FAX: 404-727-2880. Review of applications will begin immediately and the position will remain open until filled. Emory is an Equal Opportunity/Affirmative Action Employer.**

EXECUTIVE DIRECTOR Board on Agriculture

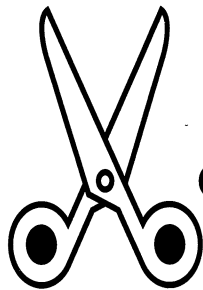
The National Research Council (NRC), the principal operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national non-profit, non-government institution located in Washington, D.C., invites applicants for the position of Executive Director of the Board on Agriculture (BA). BA activities include providing authoritative analysis of issues and problems arising in agriculture and the management of renewable resources. In pursuing its purpose, the BA is expected to (1) keep abreast of scientific, technological, and practical developments related to agriculture and renewable resources; (2) identify emerging problems and opportunities; (3) respond to requests for analyses and studies from public or private organizations; and (4) be a source of authoritative information to the general public.

The Executive Director in cooperation with the BA chairman, manages the BA as one of ten major program units of the NRC, including all scientific, financial, and administrative operations of the unit, in coordination with cognizant chairmen and subject to the policy directives of the Chairman, Vice Chairman, and Executive

Officer of the NRC. The incumbent plans and oversees the ongoing program of technical activities and studies, supervises staff, and is expected to stay abreast of major developments.

Applicants should have the following qualifications: Ph.D. or equivalent preferably in the life or physical sciences and at least 12 years experience related to agricultural research and public policy. Substantial leadership experience is required in program development, policy analysis, policy formulation, staff and personnel management, and project quality assurance. Familiarity with the role of the U.S. Government in supporting and using research in areas of international affairs, contract and grant procedures, and with institutions of higher education and industry is required. Candidates must also have a demonstrated knowledge in staff and financial management, and effective oral and written communications. Please

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POSITIONS OPEN

The Department of Pediatrics, University of Alabama at Birmingham, is seeking qualified candidates as **FACULTY MEMBER** for the Division of Gastroenterology/Nutrition. Candidates should have a Ph.D. degree with extensive experience in nutrition and lipoprotein metabolism, especially gene expression. This position involves generation of NIH support for ongoing investigative projects. Academic rank and salary will be commensurate with qualifications.

Interested persons should send curriculum vitae and a list of three references to: **Frank Franklin, M.D., Ph.D., 741, The Children's Hospital Tower, UAB Station, Birmingham, AL 35294.**

The Department of Surgery at Stanford University School of Medicine is seeking applicants for several **JUNIOR FACULTY** tenure-track positions. Openings exist for individuals with special training in surgical oncology, gastrointestinal surgery, vascular surgery, transplantation, and pediatric surgery. Applicants should have demonstrated laboratory training and research experience. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Interested applicants should write to: **Chairman, Department of Surgery, MSOB Room X-228, Stanford University School of Medicine, Stanford, CA 94305.**

MOLECULAR BIOLOGIST

Growing biotechnology company is seeking a motivated individual for an excellent career opportunity. The successful candidate will possess expertise in recombinant technology with an M.S. or equivalent. Working knowledge of protein purification is highly desirable. Submit résumé and salary history to: **Human Resources Department/MB, Pel-Freez Biologicals, P.O. Box 68, Rogers, AR 72757. Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available immediately at the University of California, San Francisco, to study molecular mechanisms underlying the regulation of gene expression by ethanol in neural cells. Send curriculum vitae and names of references to: **Dr. Michael Miles, Gallo Center, Building 1, Room 101, San Francisco General Hospital, San Francisco, CA 94110. The University of California is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available immediately to investigate the cellular and molecular immunology of human melanoma. Predoctoral experience with molecular biology/immunology essential. Send curriculum vitae to: **Dr. Joel Goodman, Department of Microbiology, Box 0414, University of California San Francisco (UCSF), San Francisco, CA 94143. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

HARVARD MEDICAL SCHOOL POSTDOCTORAL POSITION

Join multidisciplinary team investigating new approaches to cancer treatment involving radiolabeled monoclonal antibodies. Applicants should have strong background in immunology, radiochemistry, radiobiology, or molecular biology. Salary \$25,000 to \$32,000 depending on experience. Send curriculum vitae and names of two references to: **R. M. Macklis, Harvard Joint Center for Radiation Therapy, 50 Binney Street, Boston, MA 02115.**

POSTDOCTORAL POSITION. A postdoctoral position is available immediately to study the expression and function of genes induced by oxidative stress in *E. coli* and yeast. Background in genetics and protein purification preferred. Send curriculum vitae and names of three references to: **Dr. Spencer Farr, Laboratory of Toxicology, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

POSTDOCTORAL POSITION

A postdoctoral position is immediately available to study the molecular biology of *Chlamydia trachomatis*. Relevant experience in recombinant DNA, immunology, and pathology is desired. Send curriculum vitae and names and addresses of three references to: **Luis M. de la Maza, M.D., Ph.D., Professor, Department of Pathology, Medical Sciences I, University of California, Irvine, CA 92717. An Equal Opportunity Employer.**

POSITIONS OPEN



VETERINARY MEDICAL OFFICER PHYSIOPATHOLOGY RESEARCH UNIT NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ARS is seeking a scientist to participate as a team member in its research program on colibacillosis. The primary objectives of this project are to understand the pathogenesis of colibacillosis in swine, to apply molecular biology to develop improved diagnostic procedures, and vaccination strategies for control of colibacillosis.

The candidate must have clinical experience in veterinary medicine, veterinary pathology, pathogenic microbiology, and research experience in molecular biology.

D.V.M., Ph.D. is desirable. *Must be U.S. citizen.* Salary is commensurate with experience (\$31,116 to \$68,129). For information on the position, contact: **Dr. Shannon C. Whipp, Research Leader, Physiopathology Research Unit, NADC, 515-239-8242.** For information on application procedures/forms, contact: **Angie Canterini, 301-344-8250.** Applications in response to this advertisement should be marked 1N041. Applications must be postmarked by 16 May 1991. Mailing address:

**USDA, ARS, Personnel Operations Branch
6305 Ivy Lane
Room 325
Greenbelt, MD 20770**

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POSTDOCTORAL POSITIONS. National Research Council Associateships available for research on microbial pathogenesis, host resistance, and immunity to infections including anthrax. Project areas include molecular approaches to study the role and mechanisms of action of toxins, capsule, and other plasmid- or chromosome-encoded factors in virulence and immunity; cell biology of macrophage function including phagocytosis and endocytosis, antigen processing, mechanism of action of adjuvants and vaccine development; and mechanisms of innate and acquired resistance to *B. anthracis*. Candidates with a Ph.D. degree in the areas of microbiology, molecular biology, cell biology, or immunology are invited to apply. Send curriculum, names of three references, and a statement of research interests to: **Dr. Susan Welkos or Dr. Arthur M. Friedlander, Bacteriology Division, U.S. Army Medical Research Institute of Infectious Diseases, Ft. Detrick, Frederick, MD 21702. Telephone: 301-663-7341.**

POSTDOCTORAL POSITION. Available to study the autocrine regulation of ion transport in epithelial cell lines. Current activities concern the role of kallikrein and kinins in this process, and the regulation of these activities through control of enzyme synthesis, peptide degradation, and receptor activity. Candidates should have a background in cell biology and a familiarity with receptor techniques. Send curriculum vitae and names of three references to: **Dr. Donald H. Miller, Department of Cellular and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

POSTDOCTORAL POSITION. Work with a team developing computer models for Columbia River fisheries management. Involves theory development, calibration and sensitivity analysis of models. Requires experience in ecological modeling, resource management, and mathematics/statistics. Send curriculum vitae and names of three references by 10 May 1991 to: **Dr. James J. Anderson, Center for Quantitative Science, University of Washington (UW), Seattle, WA 98195. UW is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Molecular cloning of opioid receptor genes, using expression cloning, PCR and receptor isolation; biology of opioid receptor regulation in cell culture (e.g., neuroblastoma). Background in recombinant DNA technology, protein isolation, and/or neurobiology (G protein-coupled receptors). Five-year NIDA grant, and 2-year SBIR grant; available from May 1991. Send résumé and names of three references to: **Dr. W. Sadée, School of Pharmacy, University of California, San Francisco (UCSF), CA 94143. Telephone: 415-476-1947. UCSF is an Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION. Available to study kinetic properties of protein refolding using site-directed mutagenesis and other methods in conjunction with biophysical techniques such as fluorescence, CD, NMR, hydrogen-deuterium exchange in order to characterize intermediates. Molecular biology experience important. Send curriculum vitae and names of three references to: **Dr. Carl Frieden, Washington University School of Medicine, 660 South Euclid Avenue, Box 8231, St. Louis, MO 63110.**

POSTDOCTORAL POSITIONS. In NIH-funded multidisciplinary training program in parasitology/vector biology. Areas of research (and faculty) include: receptor biology of malaria parasites (Adams), biochemistry/pharmacology of parasitic helminths (Saz), host-parasite relationships/coevolution (Hellenenthal), insect biochemistry/endocrinology (Fuchs), arboviral epidemiology (Grimstad), ecological genetics of *Aedes* (Craig), and molecular evolutionary genetics/vector competence of *Aedes* (Rai). *Candidates must be U.S. citizens or permanent residents. Women and minorities are encouraged to apply.* Send résumé and three references to: **Dr. K. S. Rai, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN 46556. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. Available in neurochemistry to continue ongoing research on the role of cell surface glycoconjugates in cellular interactions in the nervous system. Candidate with experience in protein purification, receptor binding assays, cell culture, and immunohistochemistry desirable. Opportunities exist for cooperative and interdisciplinary research in Boston biomedical community. Send curriculum vitae and three references to: **Dr. Firoze Jungalwala, Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, MA 02254. Telephone: 617-642-0136.**

POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY AND PATHOGENESIS. A position is available to study structure, expression and effects of individual viral genes on pathogenesis at the molecular level in a number of poxviruses. Studies will involve not only commonly studied orthopoxviruses (vaccinia) but the less commonly studied swinepox and insect poxviruses. Long-term funding is available. Send curriculum vitae and names of three references to: **Dr. Richard W. Moyer, Department of Immunology and Medical Microbiology, Box J-266, JHMH, University of Florida, Gainesville, FL 32610. The University of Florida is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS

The hearing research faculty at The University of Connecticut Health Center offers postdoctoral positions in the neuroanatomy, neurophysiology, neurochemistry, developmental neurobiology, biophysics neural modeling, and psychophysics of the auditory system. Tissue culture, immunocytochemistry, electron microscopy, tract tracing, image analysis, intracellular and unit recording, biochemical, molecular, computational, and behavioral approaches are used to address interdisciplinary problems of binaural and monaural function. Collaborative studies between laboratories are encouraged. Please send inquiries to **Dr. Kent Morest** or any of the following investigators: **Drs. Ranjan Batra** (biophysics, developmental), **Leslie Bernstein** (psychoacoustics), **Duck Kim** (neurophysiology, modeling), **Shig Kuwada** (CNS physiology), **Kent Morest** (neuroanatomy, developmental), **Doug Oliver** (neuroanatomy), **Steve Potashner** (neurochemistry, plasticity), **Richard Saint Marie** (neuroanatomy, immunocytochemistry), or **Tino Trahiotis** (psychoacoustics), c/o **The Center for Neurological Sciences, The University of Connecticut Health Center, Farmington, CT 06030.**

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ENVIRONMENTAL PATHOLOGY/TOXICOLOGY. NRSA-supported **POSTDOCTORAL POSITIONS** available in 15 research laboratories. Emphasis on cellular and molecular effects (mutagenesis, neurotoxicity, biotransformation) of toxic chemicals (especially trace metals, aromatic hydrocarbons, ozone respiratory epithelial injury), and behavioral teratology. Inquiries: **Dr. N. K. Mottet, Program Director, Department of Pathology, SM-30, University of Washington, Seattle, WA 98195. NRSA requires U.S. citizen/permanent resident. An Equal Opportunity/Affirmative Action Employer.**

Research Scientists

Children's Hospital Oakland Research Institute, an expanding, well-funded multidisciplinary biomedical research organization, has several excellent opportunities for talented Ph.D. scientists in the following disciplines:

Biochemists/Molecular Biologists

The Lipid Biosynthesis Group, directed by Dr. Stuart Smith, has available three positions. Research is focused in two major areas: protein structure/function studies on lipogenic enzymes (see Proc. Natl. Acad. Sci. (1989) 86, 3114 & Biochem. J. (1991) 273, 787) and transcriptional regulation of fatty acid synthase expression (see Biochem. J. (1990) 271, 675). Candidates for a protein chemistry position should have experience in enzyme characterization and mutagenesis, and for a gene regulation position, experience with the appropriate molecular biology techniques including reporter gene transfection methods and DNA/protein binding assays. Appointments will be made either at the Postdoctoral Fellow or Research Assistant level, depending on qualifications and experience of the successful candidates.

Immunologist

The immunology Laboratory, directed by Dr. Alex Lucas, has a Postdoctoral Fellowship available to study human polysaccharide immunity. Work is focused on the molecular characterization of cross-reactive idiotypes and variable regions (see J. Clin. Invest. (1990) 85, 1158), mechanisms of age-related immunocompetence and structure/function studies of polysaccharide-specific antibodies. Experience in immunochemistry, monoclonal antibody production and molecular genetic analysis is desirable.

The Institute, located in the San Francisco Bay Area close to the U.C. Berkeley campus, has a staff of 75 engaged in various basic and clinical research programs. Opportunities exist for outstanding scientists ultimately to develop independent research programs. Salaries and fringe benefits are highly competitive. Children's Hospital is an equal opportunity employer. Candidates should forward resume and names of references to Human Resources Department, Children's Hospital Medical Center, 747 Fifty-second Street, Oakland, CA 94609. Tel. 415-428-3646. EOE

Children's Hospital
O A K L A N D
Research Institute

SCIENTIFIC MANAGER Yerkes Observatory THE UNIVERSITY OF CHICAGO

The Yerkes Observatory of the Department of Astronomy and Astrophysics at The University of Chicago is seeking a Scientific Manager. Located in Williams Bay, Wisconsin, a two-hour drive from The University of Chicago campus, the Observatory undertakes a variety of technical research programs, primarily in instrument development, construction and testing. The facility serves grant-supported scientific research, internal experimental initiatives and other departmental objectives. A number of large programs will soon be initiated, and adequate management is needed to supervise this high level of effort and a complex array of distinct technical projects.

Reporting to the Director, the Scientific Manager will participate in the planning and execution of the research activities conducted at the Observatory. The Manager will maintain and strengthen the role of the Observatory by providing the Department of Astronomy and Astrophysics with facilities for observational research, particularly the establishment of an infrastructure for the ongoing, aggressive development of new instrumentation. Other responsibilities include interacting with faculty responsible for the principal instrumentation projects, overseeing and coordinating the day to day operations of the Observatory, overseeing the construction of scientific apparatus, including the supervision of the technical and managerial staff, and overseeing the Yerkes Technical Services recharge operation.

This position requires a PhD in a physical or engineering science, along with experience in the management of large scientific enterprises and a broad interest in the research objectives of the Observatory. Qualified applicants should send a resume and the names of at least three references by May 31, 1991 to:

R. G. Kron, Director
Yerkes Observatory
The University of Chicago
Williams Bay, WI 53191-0258
(414) 245-5555 Fax: (414) 245-9805

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Parenteral Drug Delivery

Research Scientist

We are seeking a BS/MS physical scientist (Pharmacy, Chemistry, etc.) to assist a Ph.D. in synthesizing and characterizing colloids and suspensions, as well as carry out radiochemical analyses. Experience in colloid and surface chemistry and familiarity with biology is desirable. The ideal candidate would be comfortable with analytical instrumentation, possess excellent communication skills, and enjoy working in a collaborative environment. GV-30-91.

Research Investigator/ Senior Research Investigator (Novel Delivery Systems)

The successful candidate will conduct independent and collaborative studies on novel parenteral dosage forms for the enhanced delivery of both diagnostic and therapeutic agents. Other responsibilities are: prepare and characterize colloidal and macromolecular carriers suitably labeled with radioisotopes, fluorescent probes or chemical ligands. A strong analytical background is desirable for monitoring drug loading and good familiarity with the pharmacology of biological systems is essential. A Ph.D. degree in pharmaceuticals or the chemistry-related sciences required; additional experience at the postdoctoral or industrial level desired. Excellent communication and interpersonal skills required. GV-29-91.



Oral Drug Delivery

Research Investigator/ Senior Research Investigator

The successful candidate will develop novel technology for oral delivery of drugs, including formulation and prodrug approaches, and evaluate the technology using in vitro and in vivo methods. The candidate will also collaborate with computational scientists in the development and validation of mathematical models for predicting oral bioavailability of drugs.

A Ph.D. in Pharmaceutical Sciences with 0-2 years' experience beyond postdoctoral training, or the equivalent theoretical/technical depth is required. A strong background in formulation, analytical methods development, in vivo and in vitro models and pharmacokinetics is required. Experience in the development and evaluation of drug delivery systems is highly desirable. GV-31-91.

You will discover that we offer excellent salaries and competitive benefits. Interested candidates please indicate position code and send your resume to: Teri Foreman, Sterling Research Group, 9 Great Valley Parkway, Malvern, PA 19355. An Equal Opportunity Employer M/F/H/V.



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Carlo M. Croce, M.D., Director
offers Ph.D. training in

Molecular Genetics, Immunology, Microbiology, Molecular Pharmacology and Structural Biology

Students will take a common core curriculum consisting of courses in biochemistry, molecular biology and cell biology, followed by specialized courses in their particular area of concentration, leading to a Ph.D. degree in Genetics, Microbiology/Immunology, or Pharmacology. Facilities include oligonucleotide synthesis and automated DNA sequencing, peptide synthesis and microsequencing, cytometry and transgenic mouse production, two-dimensional nuclear magnetic resonance, X-ray crystal structure analysis, molecular modelling and graphics, utilizing high performance Silicon Graphics and Convex computers.

Current areas of research interest of the faculty include:

Molecular genetics of growth control, oncogene activation and cancer suppression (Drs. David Abraham, Renato Baserga, Timothy Block, Arthur Buchberg, Bruno Calabretta, Eli Canaani, Linda Cannizzaro, Mann-Jy Chen, Carlo Croce, Garrett DuBois, David Jensen, Robert Korngold, Danuta Kozbor, W. Edward Mercer, Veena Rao, E. Shyam Reddy, Linda Siracusana, and Tapan Som)

Genome structure and transcriptional and developmental regulation (Drs. Martyn Darby, Tadaatsu Goto, Kay Huebner, Eric Kmiec, Alexander Mazo, and Laura Steel)

Molecular and structural biology of receptors and signal transducers (Drs. Jeffrey Benovic, Catherine Calkins, Thomas Friele, Robert Harrison, Bradford Jameson, Madhu Kalia, James Keen, Gerald Litwack, Bice Perussia, Wolfgang Vogel, and Irene Weber)

Thomas Jefferson University has an excellent library system and is located in an attractive and historic part of Center City Philadelphia. Recreational facilities including gyms and a full-size pool are available on the campus. Students accepted into the program will be provided with predoctoral support including waiver of tuition and a stipend of \$14,000 per year. For interested and qualified students, an M.D./Ph.D. program is available.

For further information regarding September 1991 entrance call **Joanne Balitzky** at (215) 221-2399 or write:



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Joint Graduate Programs
College of Graduate Studies
Thomas Jefferson University
1020 Locust Street
Philadelphia, PA 19107-6799

POSITIONS OPEN

POSTDOCTORAL POSITION. Available to study signal transduction by the ANP receptor and other receptor quanylyl cyclases. Ph.D. with experience in protein/receptor biochemistry or molecular biology required; tissue culture and antibody production skills also useful. Send curriculum vitae and names of three references to: **Michael Chinkers, Ph.D., Vollum Institute for Advanced Biomedical Research—L474, Oregon Health Sciences University (OHSU), 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098. OHSU is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA SAN FRANCISCO

Available for 3 years to study the molecular genetics and biochemistry of yeast DNA topoisomerases and their relationship to nuclear structure. Please send curriculum vitae, a brief description of career goals, and the names and addresses of three references to: **Dr. Michael Christman, Radiation Oncology Research Laboratory, MCB-200, Box 0806, UCSF, San Francisco, CA 94143-0806. Telephone: 415-476-9069. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL POSITION. In plant ecological toxicology at the University of Windsor. Research on uptake and distribution of organic contaminants in aquatic plants and the evolution of contaminant tolerance. Expertise in environmental toxicology and GC/MS methodology essential; background in evolutionary genetics or plant ecology/physiology desirable. Send curriculum vitae, research interests, and three letters of reference to: **Jon Lovett-Doust, Biological Sciences, University of Windsor, Windsor, Ontario N9B 3P4, Canada. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and Canadian landed immigrants. The University of Windsor is committed to a policy of Employment Equity. Female candidates are especially encouraged to apply.**

POSTDOCTORAL POSITIONS

The W. M. Keck Center for Integrative Neurosciences at the University of California San Francisco (UCSF) invites application for three positions as **KLEBERG FOUNDATION FELLOWS**. To promote the integrative goals of the Center, we encourage research that may be supervised by at least two of the faculty, which includes: A. Basbaum, H. Fields, S. Lisberger, R. Nicoll, M. Merzenich, H. Ralston, C. Schreiner, and M. Stryker. Applicants with demonstrated strength and commitment to research in systems neurobiology are encouraged to apply. Positions will be filled by September 1991. Please send curriculum vitae, statement of research interest, and three letters of recommendation to: **A. I. Basbaum, Keck Center for Integrative Neurosciences, UCSF, Box 0452, San Francisco, CA 94143. UCSF is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

A postdoctoral position is available starting in the summer of 1991 to study the regulation of gene expression in embryonic cells by retinoic acid [see *Nature* **342**, 702 (1989)]. Ongoing studies include the characterization of transcription factors and the generation of transgenic animals with altered levels of retinoic acid-responsive genes. Experience in molecular biology and/or protein purification techniques is essential. Please send curriculum vitae and names of three references to: **Dr. Lorraine J. Gudas, Chairman, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Equal Employment Opportunity/Affirmative Action, M/F/H/V.**

POSTDOCTORAL FELLOW

To study viral/host interactions in human and rodent cells after transfection of transforming regions from human cytomegalovirus or herpes virus and human papilloma virus. Molecular studies will require Southern and Northern blot analyses, sequencing techniques, CAT assays, etc., funded by NCI. Please send curriculum vitae together with a list of three references to either: **Dr. Leonard J. Rosenthal or Dr. Jay Doniger, Department of Microbiology, Georgetown University Medical Center, 3900 Reservoir Road, N.W., Washington, DC 20007. An Affirmative Action/Equal Opportunity Employer.**

Research

STAFF SCIENTISTS AND POSTDOCTORAL FELLOWS

San Diego offers an excellent scientific environment for research in the pharmaceutical sciences. Tanabe Research Laboratories, USA (TRL) has established a drug discovery laboratory dedicated to the design of novel therapeutic agents to treat immunoinflammatory diseases. We are currently seeking experienced professionals for the following research positions:

BIOLOGISTS

Ph.D. SCIENTIST: We seek an individual interested in understanding the role of cell adhesion molecules in inflammation and autoimmunity. Experience in cloning, engineering and expression of proteins preferred. To qualify, you must hold a Ph.D. in cell biology, immunology, molecular biology or biochemistry, and have documented experience in conducting independent research.

POST-DOCTORAL FELLOW: To work on leukocyte cell adhesion molecules. Experience with cell culture and protein characterization methods is desired. A Ph.D. in cell biology, immunology, molecular biology or biochemistry is required.

CHEMISTS

Ph.D. ANALYTICAL BIOCHEMIST: The candidate will evaluate stability and metabolism of peptide, peptidomimetic and organic compounds in biological fluids and tissues. Experience in the isolation and refolding of cloned proteins, sequencing, amino acid analysis and identification, quantitation, isolation and purification of substances from natural sources is desirable. Experience in protein design, molecular modeling, receptor/protein interactions or protein delivery and transport is also a plus.

We are a highly motivated, close-knit scientific team that will provide you with a stimulating work environment. In return for your expertise, we offer a highly competitive salary and an outstanding benefits package which includes medical/dental/life insurance and a company-matched 401(k) plan. If you are interested in discovering world-class opportunities in beautiful San Diego, interviews are being held through FASEB Placement. Or please submit your resume with research interests and references to:



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POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITIONS AQUATIC ECOLOGY

The Illinois Natural History Survey offers two postdoctoral fellowships for studies on the factors controlling biological productivity and ecological integrity of the Upper Mississippi River. Emphasized areas of research include invertebrate, fish, aquatic/riparian plant, and landscape ecology. Research facilities include two large-river field stations on the Illinois and Mississippi Rivers, and our headquarters on the University of Illinois campus. Cooperating scientists include: P. Bayley, R. Herendeen, S. Kohler, L. Osborne, R. Sparks, and P. Tazik. The awards are for a minimum of 1 year. Salary is competitive, depending on qualifications and relevance of prior experience. Starting date is summer or fall 1991. Send curriculum vitae, a statement of research interests, and three letters of reference to: **Ms. Jacqueline Sanders, Personnel Officer, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820.** Deadline: 10 May 1991 or until suitable candidates are found.

POSTDOCTORAL POSITIONS. Two positions available for studies of the cochlea: (i) one patch clamp of isolated hair cells and (ii) biochemistry of amino acids. Send curriculum vitae and names of three references to: **Dr. Richard P. Bobbin, Department of Otolaryngology, Louisiana State University Medical Center (LSUMC), 2020 Gravier Street, Suite A, New Orleans, LA 70112-2234. Telephone: 504-568-4785. FAX: 504-568-4460. LSUMC is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Argonne National Laboratory has an opening for a terrestrial ecologist. The successful candidate will be responsible for assessing the effects of hydropower operations on terrestrial components of the upper Colorado River basin, including riparian plant communities, animal populations, and threatened and endangered species. Experience in remote sensing and the application of geographical information systems to ecosystem processes is desirable. Applicants with a Ph.D. in terrestrial ecology or related field should submit their curriculum vitae, the names and addresses of three references, and a statement of research interests by 26 April 1991 to: **Susan Walker, Box J-EID-KLG-55, Employment and Placement, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Argonne is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS. Three available to study: (i) immunobiology of human eosinophils including cytokines produced by and active on eosinophils and receptor signaling mediated by CD4 and other eosinophil proteins [*N. Engl. J. Med.* **324** (1991)]; (ii) roles of cytoplasmic lipid bodies in formation of eicosanoid inflammatory mediators [*J. Cell. Biol.* **113**, 137 (1991)]; (iii) molecular/biochemical parasitology of filarial nematode eicosanoids including their pathways of formation and roles in mediating interactions with leukocytes and host cells [*J. Exp. Med.* **172**, 993 (1990)]. Send curriculum vitae and names of three references to: **Dr. Peter F. Weller, Department of Medicine, Beth Israel Hospital, Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215. Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.**

POSTDOCTORAL FELLOWSHIP. In neuroanatomy-neuropathology at Harvard Medical School. Research on aging, Alzheimer's Disease, limbic system. Send curriculum vitae to: **M. Mesulam, M.D., Department of Neurology, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.**

POSTDOCTORAL FELLOW POSITIONS in neuroscience at the Addiction Research Center. Topics of research include: characterization and purification of drug and neurotransmitter receptors: cocaine receptors; neurotransmitters of reward and addiction; effects of drugs on neurotransmitter systems. Salaries range from \$29,000 to approximately \$49,000 depending on experience and qualifications. Benefits and relocation expenses may be available. Previous postdoctoral experience desirable but not necessary. Send curriculum vitae to: **Dr. Michael J. Kuhar, NIDA Addiction Research Center, P.O. Box 5180, Baltimore, MD 21224. The Alcohol, Drug Abuse and Mental Health Administration is an Equal Opportunity Employer. ADAMHA is smoke-free and drug-free.**

Research Associate/ Senior Research Associate Pathology

With four of the first six biotechnology products ever marketed, Genentech has done more to shape the industry than anyone. Join us in our ongoing efforts within our Pathology group in the Safety Evaluation department.

You will work closely with pathologists in a lead role to design and conduct independent research supporting experimental and developmental projects with recombinant DNA products. The scope of the position will be to investigate pathogenic mechanisms of toxicological effects of recombinant molecules and methods to evaluate efficacy of these products in animal models.

Requirements include a BS/MS in a Biological Science and at least 6 years' experience in the field. Preference will be given to an individual with broad experience in morphologic procedures such as electron microscopy, morphometry, immunohistochemical staining and in situ hybridization.

Our progressive company offers an extensive benefits package which includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities, free health club membership and an employee stock purchase plan. For immediate consideration, please send your resume to Nancy Symonds, Genentech, Inc., Human Resources Dept. NS/TT, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

Genentech, Inc.

Molecular Biologist/Biochemist

The Department of Immunology Research is seeking both a Senior and Junior Scientist to join a group studying receptor biology with particular emphasis on structure/function relationships and signal transduction. The goal of the group is to utilize cutting edge science to develop novel therapeutic agents for the treatment of inflammatory and autoimmune disorders.

SENIOR SCIENTIST The position requires a Ph.D. or M.D. with at least 2 years of postdoctoral experience. The successful candidate should have a proven record of creative original research in which molecular biological and biochemical tools have been employed to solve biological problems. An interest and background in signal transduction will be favorably considered.

JUNIOR SCIENTIST Applicants should have a M.S./B.S. with substantial laboratory experience. Preference will be given to candidates with a strong background in molecular biology with emphasis on cloning, mutagenesis and expression, or in biochemistry with emphasis on protein purification and characterization.

These are excellent opportunities for motivated and creative individuals to continue their scientific growth and development. Publication and internal and external collaborations are actively encouraged.

Merck Sharp and Dohme Research Laboratories is located in Rahway, New Jersey, approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, please send your resume with the names of 3 references to: **Human Resources Manager (R80-A3), Ad #70, Merck & Co., P.O. Box 2000, Rahway, NJ 07065.**

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Department of Health and Human Services
Public Health Service
National Institutes of Health
National Institute of Diabetes and Digestive and Kidney Diseases

**DIRECTOR,
DIVISION OF DIABETES, ENDOCRINOLOGY AND
METABOLIC DISEASES (DEMD)**

Opening Date: April 10, 1991 Closing Date: May 31, 1991
(All applications must be postmarked before closing date.)

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) invites nominations and applications for the position of Director, Division of Diabetes, Endocrinology and Metabolic Diseases. This Institute conducts, fosters, and supports research and research training on the prevention, management, and cure of diabetes and related endocrine and metabolic diseases; kidney, urologic and blood diseases; and digestive diseases. Programs encompass intramural laboratory research and extramural (grants and contracts) activities in fundamental diabetes, digestive and kidney disorders.

The Director, Division of Diabetes, Endocrinology and Metabolic Diseases, has the management responsibilities for matters and policies pertaining to research grant, contract, training and specialized programs in diabetes, endocrinology and metabolic diseases including basic and applied research, training fellowships and institutional training awards, multipurpose centers of research, clinical trials, technological development and application of research findings; collection and dissemination of reliable data and information, budget development; planning and directing a trans-NIH Diabetes Program to provide coordination, continuity and leadership in diabetes at the NIH; and advising and participating with outside voluntary health organizations, and the National Advisory Council and National Diabetes Advisory Board in identifying and assessing the needs and requirements for research and manpower development in categorical diseases.

This is a Civil Service position in the Senior Executive Service (SES), with a salary range from \$87,00 to \$100,500 per annum, depending on qualifications. Physicians may be eligible for a comparability allowance up to \$20,000 per year. (Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) Mandatory professional/technical qualifications are a medical degree or baccalaureate in a health or health related science (or equivalent combination of experience and training) and research program administration and/or clinical experience in one or more areas related to diabetes, endocrinology and metabolic diseases. Further information on these qualifications is available by contacting Ms. Sheila E. Williamson, Personnel Management Specialist, National Institute of Diabetes and Digestive and Kidney Diseases, Building 31, Room 9A30, Bethesda, Maryland 20892, (301) 496-4231.

Mandatory managerial/executive qualifications include evidence of management of a basic or clinical research program, demonstrating ability to assume leadership responsibilities in developing program goals; representing the program to outside groups; directing program planning, execution, and evaluation; and conducting a fair and equitable employment program, including the attainment of EEO objectives.

Candidates who meet the mandatory qualifications will be further evaluated by the Search Committee on the degree to which they exceed the mandatory managerial/executive qualifications, and on the following desirable qualifications: scientific reputation/peer recognition; training and education; leadership of a basic or clinical research or research administration program, and honors and awards.

Applications (Application for Federal Employment, SF-171), should be sent to:

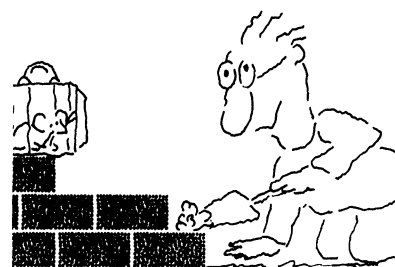
**Mr. Clifford Moss, Executive Secretary
Search Committee for Director
Division of Diabetes, Endocrinology
and Metabolic Diseases
Building 31, Room 9A30
National Institute of Diabetes and
Digestive and Kidney Diseases
Bethesda, Maryland 20892
Telephone (301) 496-4231**



A current curriculum vitae and bibliography must accompany all applications. Applicants of women and/or minority group members are especially solicited.

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New York, NY 10036**

The Global Weekly of Research
SCIENCE

Inflammation Research Scientist

The Procter & Gamble Company has an immediate opening for a Ph.D. inflammation scientist to provide leadership and direction in a research program to discover and develop novel therapeutic agents to treat arthritis and other inflammatory diseases. Candidates should have a Ph.D. in pharmacology, biochemistry, immunology, or related sciences with a minimum of 2 years postdoctoral experience in the use of *in vitro* and *in vivo* models in inflammation research. The successful applicant will be expected to develop a program to identify novel approaches to intervene in the cellular and biochemical mechanisms involved in the pathogenesis of arthritis and other inflammatory diseases. Research experience in evaluating the pharmacological effects of agents on the functions of inflammatory and immune cells is desirable.

Besides offering a stimulating environment for professional growth, the Company provides a competitive employment package including paid relocation, and Company-paid health, dental, and profit sharing benefits.

Candidates must be presently authorized to work in the U.S. on a full-time basis. Send resume, with publication list to:

Dr. T.J. Logan, Mgr. Ph.D. Recruiting
Inflammation Scientist Position, Box MH
THE PROCTER & GAMBLE COMPANY
P.O. Box 398707, Cincinnati, OH 45239-8707

Allow 6-8 weeks for response.

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BIOCHEMIST

**AMERICAN INTERNATIONAL HOSPITAL
in ZION, ILLINOIS near Lake Michigan**

WE NEED a PhD Biochemist with a strong background in cancer drug chemotherapy/toxicology.

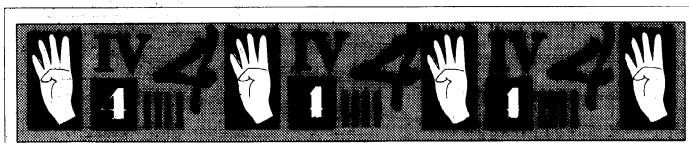
AT LEAST 2 to 3 years experience in clinical analysis of serum samples, particularly in the areas of 5-Fu and leucovorin as well as oxidative metabolites and protein metabolism is required.

SUCCESSFUL CANDIDATE will have solid publication record evidenced by senior authorship of papers. Experience with PCs and C-like language helpful.

WE OFFER a competitive compensation program. To be considered, please send resume to:

Human Resources,

American International Hospital,
Shiloh Blvd.,
Zion, IL 60099,
or call 708-746-4257 (e.o.e.)



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SCIENCE, 1515 Broadway, NY, NY 10036

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POSITIONS OPEN

THE MORRISON MEMORIAL POSTDOCTORAL FELLOWSHIP

The Department of Biochemistry, St. Jude Children's Research Hospital (SJCRH), is enlarging its research efforts in the area of the molecular and cellular biology of signal transduction. As part of this expansion, the Board of Governors has established a memorial fellowship in honor of Dr. Martin Morrison, the founding chairman of the department. The research programs with the department are well equipped and offer recent Ph.D. or M.D. graduates the opportunity to participate in energetic multidisciplinary groups dealing with a range of basic and clinically oriented research. SJCRH offers a competitive stipend and annual review for reappointment. The beginning date of the fellowship is 1 July 1991. Current research programs within the department include:

- **W. Y. Cheung:** Regulatory properties and biological functions of calmodulin, Ca^{2+} -regulated enzymes and other Ca^{2+} -binding proteins.
- **J. Cleveland:** Transcriptional regulatory factors which control myeloid cell cycle progression.
- **J. N. Ihle:** Mechanisms of hematopoietic stem cell growth regulation, differentiation and transformation.
- **S. Jackowski:** Cell cycle regulation of membrane phospholipid biosynthesis.
- **C. Rock:** Role of phospholipid-derived second messengers in growth factor action.

Applicants should submit a brief statement of their research interests, curriculum vitae, reprints, and the names of three references to:

**The Morrison Postdoctoral Fellowship
Department of Biochemistry
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38101**

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GLOBAL CHANGE POSTDOCTORAL FELLOWSHIPS

Global Change Distinguished Postdoctoral Fellowships provide opportunities related to the U.S. Global Change Research Program. This program encompasses the full range of earth system changes including physical, chemical, biological, geological, and social. Fellowships are tenable at approved federal and university laboratories including those of the Department of Energy, NASA, NCAR, USDA, and other agencies. Stipends are \$35,000. A doctoral degree received after 1 May 1988 is required as is *U.S. citizenship or PRA status*. Deadline is 1 May 1991. Contact: **Global Change Distinguished Postdoctoral Fellowships, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-4805.**

POSTDOCTORAL FELLOWSHIP/ASSOCIATE-SHIP. In chemistry or biology of polypeptide hormones (2 or 3 years), beginning July 1991.

Opportunities for Ph.D.'s in interdisciplinary group, studying polypeptides of pituitary or other tissues, using HPLC, gas phase microsequencing, peptide synthesis, GC/mass spectrometry, carbohydrate chemistry, RIA/EIA/IRMA bioassay, etc., to isolate, identify, synthesize, measure, and characterize function of known/unknown pituitary (or other) peptides. Stipend: \$45,000 plus relocation expenses. For *U.S. citizens or permanent residents*. Send curriculum vitae and three references to:

**Dr. A. F. Parlow
Harbor-UCLA Medical Center
1000 West Carson Street
Torrance, CA 90509**

POSTDOCTORAL FELLOWSHIPS IN THE NEUROBIOLOGY OF AGING. The Center for the Neurobiology of Aging at the University of Florida invites applications for NIA training grant-funded postdoctoral fellowships. The center consists of over 40 faculty members investigating a variety of areas in the aging nervous system, including: gene structure and function, receptor transduction mechanisms, novel drug and gene delivery systems for Alzheimer's disease, movement- and memory-related behaviors, and neuroimmunology. Selected candidates are contacted by interested faculty who sponsor their applications. Submit your curriculum vitae and names of two referees to: **Edwin M. Meyer, Ph.D., Director, Center for the Neurobiology of Aging, Box J-267, University of Florida, Gainesville, FL 32610.**

POSITIONS OPEN

NEUROSCIENTISTS with research interests in excitotoxins as pertaining to neurological disorders are invited to apply for positions at the **POSTDOCTORAL MEDICAL FELLOW** level and as independent research investigators. Pacific Presbyterian Medical Center (PPMC), an extensive medical complex located in the heart of San Francisco, is a major tertiary referral center for ALS and is currently developing a stroke program. Applicants should send curriculum vitae, selected reprints, names and address of three references, and a letter of research interests to: **The Internal Committee, PPMC, 2351 Clay Street, Room 416, San Francisco, CA 94115. PPMC is an Equal Opportunity Employer.**

POSTDOCTORAL FELLOW

Two positions are available for recent Ph.D. to study the molecular genetics of familial Alzheimer's disease and Werner's syndrome. Projects involve linkage analysis, cloning and identification of mutations in candidate genes, and genetic and physical mapping. A background in molecular biology and genetics or biochemistry is preferred. Experience in recombinant DNA technology is required. Please send curriculum vitae and three letters of reference to: **Dr. Gerard Schellenberg, Division of Neurology RG-27, School of Medicine, University of Washington, Seattle, WA 98195. Telephone: 206-543-2340. FAX: 206-685-8100. The University of Washington is an Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP

The Cellular and Molecular Biology Group in the Life Sciences Division of the Los Alamos National Laboratory is seeking a postdoctoral fellow to perform basic cellular and molecular biological research in the area of mechanisms of carcinogenesis. In particular, we are interested in the role of chromosomal instability in neoplastic progression with emphasis on the clastogenic properties of early proteins of the small DNA tumor viruses. Individuals with a strong background in both cellular and molecular biology are encouraged to apply. Applicants should have received their doctoral degree within the past 3 years. Postdoctoral appointments are for 1 year, renewable for a second year. The salary range is \$36,666 to \$38,619 per year. For further information, contact: **Paul M. Kraemer, Ph.D., Cellular and Molecular Biology Group, Life Sciences Division, MS M888, Los Alamos National Laboratory, Los Alamos, NM 87545. Telephone: 505-667-2750. FAX: 505-665-3024.** To formally apply, please send curriculum vitae, a letter describing research interests, employment application, three letters of reference, and graduate and undergraduate transcripts to: **Ronnie Cohen (MS P280), Human Resources Development Division PD-91-082, Los Alamos National Laboratory, Los Alamos, NM 87545.** For employment applications, telephone: 505-667-0872. *Los Alamos is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIPS DEVELOPMENTAL/MOLECULAR BIOLOGY

Two positions available to study the molecular and developmental biology of primary response genes.

The first position involves the characterization of immediate early response genes induced by growth inhibitors. Such genes are of paramount importance in malignancy and embryogenesis. Preliminary characterization of these genes has been recently published: *J. Biol. Chem.* **264**, 16905-16909 (1989); *J. Biol. Chem.* **265**, 2973-2978 (1990); *J. Biol. Chem.* **265**, 14705-14708 (1990); *Mol. Cell. Biol.* **10**, 5630-5638 (1990).

The second position involves the study of the role of thrombospondin, an extracellular matrix protein in cell growth and embryogenesis. A recent description of the work may be found in the *J. Biol. Chem.* **264**, 11222-11227 (1989); *J. Cell Biol.* **109**, 843-852 (1989); *J. Biol. Chem.* **264**, 10888-10896 (1989); *J. Cell Biol.* **110**, 1275-1284 (1990); *J. Cell Biol.* **111**, 2713-2723 (1990).

Requirements include *U.S. citizenship or permanent residency*. Interested candidates should send their curriculum vitae and names of two references to:

**Dr. V. M. Dixit
The University of Michigan
Department of Pathology
1301 Catherine Street, Box 0602
Ann Arbor, MI 48109-0602
Telephone: 313-747-2921
FAX: 313-764-4308**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN IMMUNOLOGY, 1992-1995

The Irvington Institute for Medical Research will award up to ten (10) postdoctoral fellowships in immunology for three (3) consecutive years of work in a laboratory or hospital in the United States. A laboratory may qualify for only one (1) fellow per year.

M.D.'s, Ph.D.'s, and M.D./Ph.D.'s are encouraged to apply. Candidates with not more than three (3) years of laboratory experience will receive priority.

The institute will pay a stipend of \$22,000, \$24,000, and \$26,000 for years one, two, and three, with an additional \$2,000 each year paid directly to the host institution to help cover the costs of health insurance, travel, and supplies.

The deadline for filing applications is 15 August 1991. The institute will notify applicants in November 1991 whether they have been selected to receive a fellowship to begin 1 July 1992.

Applications may be obtained by writing to: **The Fellowship Coordinator, The Irvington Institute for Medical Research, 120 East 56 Street, #340, New York, NY 10022. FAX: 212-758-8968.**

Louisiana State University (LSU) Eye Center has two openings for **POSTDOCTORAL FELLOWSHIPS**. First position requires a doctorate in life sciences with experience in drug delivery desirable. Second position requires a doctorate in life sciences with experience in primary cell culture and light and electron microscopy techniques. Ocular pathology experience is a definite plus. Please send application and curriculum vitae with three references to: **Dr. Bahram Khoohebi, LSU Eye Center, 2020 Gravier Street, Suite B, New Orleans, LA 70112. LSUMC is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS

Postdoctoral fellowship positions for the anatomical and physiological study of labeled grafts into the central nervous system. The anatomical position will involve the analysis and labeling of grafted cells, in both tissue culture and in vivo. The physiological position will involve selective recording from grafted neurons and the study of the integration of these neurons into the host. Both positions are NIH-funded and will start 1 April 1991. Please contact either **Roger Madison, Ph.D.**, or **Dennis A. Turner, M.D.**, for further information at the following address: **Division of Neurosurgery, Box 3807, Duke University Medical Center, Durham, NC 27710. Telephone: 919-684-6706. Affirmative Action/Equal Opportunity Employer.**

CENTER FOR NEUROSCIENCE UNIVERSITY OF PITTSBURGH (CNUP) CLINICAL NEUROSCIENCE RESEARCH POSTDOCTORAL FELLOWSHIP

Fellowship for physicians interested in acquiring basic laboratory skills to investigate neurological or neuropsychiatric diseases. The fellowship would ordinarily be initiated upon completion of a residency but might be implemented at other times in special cases. Fellows will work with both basic science and clinical mentors. The stipend is \$30,000 to \$35,000 per year for training periods up to 3 years. Write: **CNUP CNR Program, Center for Neuroscience, University of Pittsburgh, W1656 Biomedical Science Tower, Pittsburgh, PA 15261** for detailed information and application.

POSTDOCTORAL ASSOCIATE OR ASSOCIATE RESEARCH SCIENTIST. Position is available at the Yale Liver Center for an individual with training in molecular biology, preferably expression cloning of membrane transport proteins. Send curriculum vitae and three letters of reference by 30 June 1991 to: **Pamela L. Costa, Assistant Administrator, Yale University School of Medicine, Department of Medicine, Section of Digestive Diseases, P.O. Box 3333, New Haven, CT 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSISTANT. Position immediately available for a person experienced in molecular biology to join a research team working on human breast cancer. M.S. or Ph.D. required; competitive salary and benefits. Send curriculum vitae and references to: **Dr. Beatriz Pogo, Box 1131, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

BIOLOGY ASSOCIATE

Cardiovascular Diseases Research

The Upjohn Laboratories Division of the Upjohn Company has a research associate position available for a membrane electrophysiologist/electropharmacologist to examine ionic mechanisms of action of cardioactive compounds. Primary duties involve impalement of isolated single heart cells with either microelectrodes or patch pipettes for intracellular recordings of action potentials and membrane currents. Extensive bench-work experience in current and voltage clamp technology is preferred.

A BS or MS degree is required in a relevant biological science. Upjohn offers a very competitive compensation and benefits program with relocation assistance. For consideration, please forward your resume and cover letter to: THE UPJOHN COMPANY, CORP. RECRUITING/POSITION 910166-016, 7000 PORTAGE ROAD, KALAMAZOO, MI 49001 USA and refer to position 910166-016 in your cover letter. An Equal Opportunity Employer M/F.

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BIOMEDICAL SCIENTISTS

CHORI is a well-funded, multidisciplinary biomedical research organization. The Metabolic Nutrition Laboratory, including the Mass Spectrometry Facility have strong ongoing research programs in collaboration with investigators at U.C. Berkeley and U.C.S.F. The lab has three mass spectrometers capable of GC/MS, thermospray HPLC/MS, FAB and Electrospray MS operation. The following Ph.D positions are open.

Clinical Biochemist

The Metabolic Nutrition Lab requires a manager to oversee its analytical and budgetary operations. This lab carries out sophisticated metabolic and nutritional analyses for CHO, as well as having an important research component. The applicant should ideally have experience in: HPLC, ion-exchange chromatography, atomic absorption spectrometry, liquid scintillation counting, gas chromatography and mass spectrometry. Must have or be eligible for a California clinical chemist or medical technologist license. Experience in metabolic research highly desirable. Development of externally funded research programs encouraged.

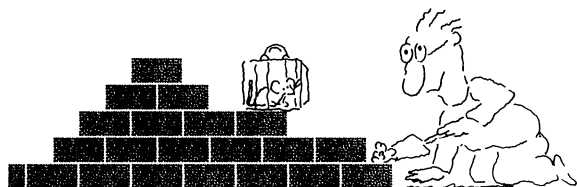
Biochemist/Mass Spectrometrists

The Mass Spectrometry Facility has available a Postdoctoral fellowship position to support programs in endocrinology, metabolism and protein characterization (J. Chromat. 162:175, 1991). Experience in mass spectrometry and glycoprotein chemistry preferred.

Forward resume and references to Dr. Cedric Shackleton, c/o H.R. Dept., Children's Hospital Oakland, 747 52nd St., Oakland, CA 94609, Tel: (415) 428-3646. EOF

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New Lab Service Department
1515 Broadway
New York, NY 10036

The Global Weekly of Research
SCIENCE

Molecular Neurobiologist Cell and Developmental Biologist Assistant Professor Meharry Medical College

Applications are invited for two tenure track positions at the Assistant Professor level beginning September, 1991 in the Division of Biomedical Sciences here at Meharry Medical College. Appointments are for candidates with an interest in molecular neurobiology and cell and developmental biology. Signal transduction is of special interest. The individuals will have teaching responsibilities for medical and graduate students and will be expected to maintain a funded research program. Active interdepartmental neuroscience, cell and molecular biology, and tropical diseases research programs exist and the individual will be expected to develop appropriate collaborations. Applicants should have a Ph.D. or M.D. and relevant postdoctoral experience and should provide *curriculum vitae*, summary of research plans, reprints of three representative publications, and the names of three references to:

Dr. George C. Hill
Professor and Director
Meharry Medical College
Division of Biomedical Sciences
1005 D. B. Todd, Jr., Blvd.
Nashville, TN 37208
(615) 327-6193

Applications will be accepted until position is filled. Initial review will begin May 1, 1991. Meharry Medical College is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATES. Two postdoctoral fellowships are available in the field of high throughput DNA sequencing and restriction fragment mapping using high-performance capillary gel electrophoresis and laser-based detection. Experience in DNA sequencing and mapping preferred. Research program is heavily interdisciplinary, oriented under the Human Genome Effort. Positions are available immediately or a start date can be within 4 months. Write to: **Professor B. L. Karger, Barnett Institute, Northeastern University, 360 Huntington Avenue, Boston, MA 02115.** *Northeastern is an Equal Opportunity/Affirmative Action/Title IX University.*

POSTDOCTORAL RESEARCH ASSOCIATE

Cancer Research Laboratory, The Mercy Hospital of Pittsburgh, Pittsburgh, Pennsylvania, has two positions for highly qualified Ph.D.'s with experience in molecular biology and/or biochemical techniques to work in the area of: (i) Alkylating and multi-drug resistance; (ii) characterization of potentially new lung cancer genes. Salary: \$20,000 to \$30,000.

Interested individuals should send curriculum vitae, copies of publications, and references to:

Vicram Gupta, M.D.,
Medical Director, Mercy Regional Oncology Center
1400 Locust Street
Pittsburgh, PA 15219

MOLECULAR BIOLOGIST

Unique and challenging opportunity for a **POSTDOCTORAL RESEARCH SCIENTIST** to investigate vascular wall molecular biology and its role in atherogenesis at the Ohio State University (OSU) Vascular Biology Laboratory and the OSU Biotechnology Center. Experience in vascular biology is highly desirable. Salary will be commensurate with experience. Please send detailed curriculum vitae and three letters of recommendation to:

J. Gordon Wright, M.D., Director
Vascular Biology Laboratory
The Ohio State University
Room N-716 Doan Hall
410 West 10th Avenue
Columbus, OH 43210

An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS IN BRAIN METAL PHYSIOLOGY/TOXICOLOGY

Available immediately at the National Institute on Aging, National Institutes of Health, Public Health Service, Bethesda, Maryland, to examine (i) metal localization in postmortem human brain tissue and (ii) metal transport, distribution, and physiologic/toxicologic actions within the central and peripheral nervous systems of small animals in aging and disease. Methods include x-ray microanalysis, atomic absorption spectrometry, inductively coupled plasma-mass spectrometry (ICP-MS), and radiotracer counting. Experience in tissue sectioning and staining helpful. Positions available for up to 3 years with salary commensurate with qualifications. Send applications with curriculum vitae and names of three references to: **Dr. Quentin R. Smith, Laboratory of Neurosciences, National Institute on Aging, National Institutes of Health, Building 10, Room 6C-103, 9000 Rockville Pike, Bethesda, MD 20892.** Telephone: 301-496-8970. *NIH is an Equal Opportunity Employer.*

MOLECULAR BIOLOGIST

The Division of Respiratory Disease Studies, National Institute for Occupational Safety and Health (NIOSH), Morgantown, West Virginia, is seeking a qualified molecular biologist with postdoctoral experience, trained in the most recent techniques in the field. Successful candidates will have an opportunity to work with internationally known scientists in the Laboratory Investigations Branch. Experience in research related to occupational lung disease or development of assay systems or biomarkers for the detection of potential health hazards of worksite chemicals is preferred. Comparative compensation package; minimum salary: \$37,294. For immediate consideration, please send curriculum vitae and three professional references to: **Ronda Braham Smith, NIOSH, 944 Chestnut Ridge Road, Morgantown, WV 26505.**

POSITIONS OPEN

STAFF SCIENTIST AND ASSISTANT STAFF SCIENTIST

The La Jolla Cancer Research Foundation is now entering a new phase of expansion and seeks nominations for and application from qualified researchers. The following research areas are emphasized.

- Oncogenes and tumor suppressor genes
- Animal lectins, including selectins
- Ultrastructural biology

Successful candidates are expected to establish a strong independent research program, while fostering interactions with other faculty members. Applicants with solid NIH funding are encouraged to apply, while exceptional applicants at the entry level will also be considered. Rank and salary will depend on experience and qualifications. Applicants should submit their curriculum vitae, a summary of current research interests and future plans, and three letters of evaluation to:



The Search Committee
La Jolla Cancer Research Foundation
10901 North Torrey Pines Road
La Jolla, CA 92037

La Jolla Cancer Research Foundation is an Equal Opportunity Employer.

ASSISTANT RESEARCHER HAWAIIAN EVOLUTIONARY BIOLOGY

The Hawaiian Evolutionary Biology Program (HEBP) is seeking to fill an assistant researcher position to conduct research in the area of ecology, evolution, and conservation biology with strong emphasis on the endemic Hawaiian biota. This is a tenure-track appointment to begin approximately 1 July 1991. Candidates must have Ph.D. in an appropriate discipline with postdoctoral experience in evolutionary biology. Candidates will also be expected to participate in the development and teaching courses in the ecology, evolution, and conservation biology graduate program. Submit curriculum vitae and names and addresses of three references to: **Dr. Kenneth Y. Kaneshiro, Director, HEBP, University of Hawaii, 3050 Maile Way, Honolulu, HI 96822.** Closing date: 31 May 1991.

An Equal Opportunity Employer.

INSTRUMENT SCIENTIST

The Jet Propulsion Laboratory is currently seeking an instrument scientist to work on the Active Cavity Radiometer Irradiance Monitor on the Earth Observing System for the Solar Irradiance Monitoring Group.

Requires an M.S. or Ph.D. in physics, solar physics, astrophysics, earth sciences, or applied sciences, along with an experimental orientation with instrumentation and computer (UNIX, FORTRAN, TCP/IP) background. Experience with flight experiments desirable.

To apply, please submit résumé to:

Professional Staffing, Department T-17
Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive 249/104
Pasadena, CA 91109

Equal Opportunity Employer.

ASSISTANT RESEARCH SCIENTIST DEPARTMENT OF PHARMACOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

RESEARCH POSITION available immediately for a scientist to conduct research in the field of cellular/molecular mechanisms of reinforcement. Study operant conditioning of individual neurons in vitro brain slice using electrophysiological and pharmacological methods. Requirements: advanced degree in pharmacology or related discipline, experience recording electrophysiological signals from brain slice. Computer programming experience desirable. Salary: \$41,600 to \$52,900. Send curriculum vitae and names and addresses of three references by 1 May 1991 to: **Dr. James D. Bellussi, Department of Pharmacology, College of Medicine, University of California, Irvine, CA 92717.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ANALYTICAL ULTRACENTRIFUGATION

Experienced professional to participate in development of instrument, data analysis software, and applications methodologies. Must be able to communicate well with engineering and marketing professionals. Excellent presentation skills required. Will travel and make presentations to scientific assemblies. Ph.D. in physical chemistry or related field with related research experience preferred. Send résumé with salary history to: **Beckman Instruments, Professional Staffing, 1050 Page Mill Road, Palo Alto, CA 94304.** *Equal Opportunity Employer.*

CELL ANALYSIS SPECIALIST

The Cell Analysis Facility, Department of Immunology, University of Washington, has an immediate opening for a technical specialist in flow cytometry/image analysis. Responsibilities include the operation and maintenance of a dual laser FACStar Plus, FACScan, and fluorescence microscope. The successful candidate will also participate in the development of new methods and instrumentation for cell analysis. A bachelor's degree is required. Experience in flow cytometry is highly desirable. Training in the physical sciences and experience with computers (MS-DOS and UNIX) are essential. Send résumé including recent experience, long-term goals, and references by 26 April 1991 to: **David M. Coder, Director, Cell Analysis Facility, Department of Immunology, 1 264 Health Sciences Building, SL-05, University of Washington, Seattle, WA 98195.** An official application will be forwarded to each applicant. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE RESEARCH SCIENTIST

Nontenure-track position available in the Department of Physiology and Cellular Biophysics. Candidates must possess M.D. or Ph.D. degree and at least 3 years of postdoctoral experience in endothelial cell biology, coagulation physiology, and biochemistry of tumor cell products. Send application with full curriculum vitae to: **Dr. David M. Stern, Department of Physiology and Cellular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032.** *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE. To conduct both independent medical research and collaborative work with physicians in a medical institution. Main duties involve laboratory investigations of inflammatory eye disease with use of immunological techniques. Must have M.D.-M.S. or equivalent with concentration in biochemistry. Three years of research experience in ocular immunology. Forty hours per week, 8 a.m. to 5 p.m.; salary: \$31,000 per year. Send résumé to: **Ms. Jimmie Gaston, Missouri Job Service, 505 Washington, St. Louis, MO 63101, JO#453730.** *Must have legal authority to work permanently in the United States.*

The Intermountain Research Station, USDA Forest Service, is recruiting a **RESEARCH BIOLOGIST** to be located at the Forestry Sciences Laboratory, University of Montana, in Missoula, Montana. Job responsibilities involve planning and conducting independent research designed to improve ecosystem management in wilderness areas. Starting salary: \$31,116 to \$48,481, depending on qualifications and experience. Qualified individuals should send résumé and statement of research interests to: **Dr. David Cole, P.O. Box 8089, Missoula, MT 59807.** A job vacancy announcement will be sent to respondents.

RESEARCH SCIENTIST POSITION. Available immediately for studying metabolism of chemical carcinogens and DNA adduct formation in mammalian and fish systems. Ph.D. in biochemistry, bioorganic chemistry, biochemical toxicology, pharmacology, or related field required. Experience in isolation and structural identification of metabolites preferable. The position provides an opportunity for developing a program of candidate's interest. Please send résumé and names of three references to: **Dr. H. Sikka, Director, Division of Environmental Toxicology and Chemistry, Center for Environmental Research, State University of New York College at Buffalo, 1300 Elmwood Avenue, Buffalo, NY 14222.** Telephone: 716-878-5422. FAX: 716-878-5400.

R E S E A R C H

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MONOCLONAL ANTIBODIES
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The Sandoz Research Institute is substantially expanding the size and scope of its research programs and is seeking outstanding scientists to contribute to the research effort on new therapeutic approaches in immunology and inflammation. These positions offer unique opportunities for innovative, self-motivated, and independent scientists to conceive and develop potential products. The successful candidates will work closely within an interdisciplinary team of molecular biologists, immunologists, biochemists, and cell biologists.

The requirements of the positions include the following:

- Ph.D. or equivalent and preferably post-doctoral experience in immunology or a related discipline as well as a record of significant publications in major scientific journals.
- BSc and MSc or equivalent degrees with experience in the above research areas.

Positions at Sandoz offer personal satisfaction, professional opportunity/challenge, competitive salaries, and an excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey.

For prompt consideration, please respond to position #IMM2 and forward your resume, with salary requirements, in confidence, to:

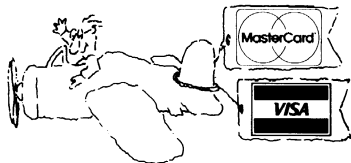


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Matrix Pharmaceutical, Inc. is a drug delivery company focused on enhancing the effectiveness of drugs to treat cancer and skin diseases. As a result of our expanding research programs we have immediate openings for a Director of Protein Chemistry and Research Associates.

Responsibilities include the development of analytical and synthetic techniques to investigate drug/protein interactions and protein modification relating to the development of novel drug dosage forms. For candidates for the Director position, Ph.D. in Biochemistry or Chemistry, 4+ years industry experience in structural protein purification, characterization and modification. For Research Associate positions, B.S. or M.S. with 3+ years experience.

Please forward your résumé including salary history to: Matrix Pharmaceutical, Inc., Attn: Human Resources PCD, 1430 O'Brien Drive, Suite H, Menlo Park, CA 94025. We are an equal opportunity employer.

Matrix Pharmaceutical, Inc.

RESEARCH ENGINEER/ SCIENTIST

Medtronic, Inc., the world's leading manufacturer of implantable medical products, has an exceptional opportunity for an Engineer/Scientist in our Cardiac Pacing Research Department.

This person will be responsible for modeling of advanced research concepts applicable to implantable defibrillation and pacing systems. A PhD or MS in Engineering/Physics with at least 3-5 years of experience in finite element modeling is required. Familiarity with modeling of electrical fields is desirable.

Medtronic, Inc. offers a highly competitive compensation and benefit package plus the opportunity for personal recognition in an environment where new ideas and initiative are encouraged. Please send your resume in confidence to: **Vern Brewster, MEDTRONIC, INC., 7000 Central Avenue N.E., Minneapolis, MN 55432.**

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POSITIONS OPEN

RESEARCH ASSISTANTS GENETIC ENGINEERING

Applications are invited from innovative and motivated individuals for career technical positions in molecular biology and cell biology at Agracetus. Candidates should hold B.S. or M.S. degrees in relevant scientific disciplines, and have demonstrated laboratory experience in mammalian cell culture, and cytogenetic, molecular, or biochemical techniques. The successful candidates will join an enthusiastic team in developing new and useful applications for genetic engineering in mammalian cells.

Agracetus, Inc., a biotechnology subsidiary owned by W. R. Grace and Co., offers competitive salaries, a comprehensive benefits package, and advancement opportunities. Our laboratories are located near Madison, the capital city of Wisconsin. An active regional economy, the University of Wisconsin, and the pleasant environment of south-central Wisconsin combine to present a wide variety of cultural and recreational activities for area residents.

Please send your résumé in confidence to: **Personnel Department, Agracetus, Inc., 8520 University Green, Middleton, WI 53562.** *We are an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE

A postdoctoral position is immediately available to study DNA methylation and restriction enzymes, and for developing new genome mapping strategies. Research in the laboratory is supported by the National Institutes of Health and by industrial funds. Good working knowledge of molecular biology including recombinant DNA and/or of protein biochemistry is desirable. Expected salary is \$22,000 and is negotiable. Two to three years of support is anticipated. Send curriculum vitae and three letters of recommendation to: **Dr. Ashok S. Bhagwat, 437 Chemistry, Department of Chemistry, Wayne State University, Detroit, MI 48202.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE

Investigate molecular mechanisms of aging and effect of ambient UV light on human lens on tissue, macromolecular and molecular levels, through photochemical studies using protein purification, digestion of peptides, SDS-PAGE, HPLC, TLC, UV, and fluorescence spectra meters; manipulate, isolate and examine human tissue and their constituent components. B.S. in chemistry plus 2 years in job or 2 years as chemical technologist. Must have performed photochemical studies on tissue, macromolecular and molecular levels using SDS-PAGE, HPLC, TLC, UV and fluorescence spectra meters. Must know techniques of protein purification and digestion of peptides. Forty hours per week; \$18,000 per year. Contact: **Dr. James Dillon, Ph.D., Director of Photobiology Laboratory, Department of Ophthalmology, Columbia University, telephone: 212-305-9088.**

Equal Opportunity Employer.

RESEARCH ASSOCIATE

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

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

SENIOR RESEARCH SCIENTIST (ten openings). R&D in flight control system design, estimation and guidance algorithm development, computer-aided control system design, flight simulation, advanced system and control research, model development and validation, system integration, and prototype implementation. Ph.D. in computer or physical sciences, applied math or electrical engineering required, plus 1 year of experience or master's plus 4 years of experience. Experience must include all aspects of job offered; \$4800 per month. Location: Chatsworth. Send ad and résumé to: **Job #WS12129, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 27 April 1991.

POSITIONS OPEN

INTERDISCIPLINARY (RESEARCH PLANT PATHOLOGIST/PLANT PHYSIOLOGIST). Located at the U.S. Department of Agriculture (USDA), Forest Service, Southern Forest Experiment Station, Southern Hardwoods Laboratory, Stoneville, Mississippi. Develops guidelines to minimize disease losses in intensively cultured and multi-use natural stands of southern hardwoods. Emphasis is on developing hazard rating systems and biological and chemical controls for hardwood declines, oak wilt in live oak, and other important pests. Salary ranges from \$31,116 to \$44,348 per year, based on qualifications. Applicants must possess at least a master's degree. Contact: **Dr. James Solomon at 601-686-7218 or Dr. Walter A. Hough at 504-589-3003.** *The USDA is an Equal Employment Opportunity Employer.*

IMMUNOPARASITOLOGIST. Develop and test assays/vaccines for research and development on protective malaria immunity. Produce malaria-infected mosquitoes and isolate infective malaria sporozoites by maintaining life cycle of rodent malarial, dissecting mosquitoes to evaluate oocysts/sporozoites, and harvesting/inoculating sporozoites. Test pre-erythrocytic stage malaria vaccines including Vaccinia, Pseudorabies, and *Salmonella* in rodent model systems. Characterize cellular immune response after immunization with emphasis on identifying cytotoxic T lymphocytes. Requirements: Ph.D. in immunology and 3 years of experience in job offered. Forty hours per week, 8 a.m. to 4:30 p.m.; \$37,200.70 per year. Job in Bethesda, Maryland. Mail résumé and copy of ad to: **DEED, 1100 North Eutaw Street, Room 212, Baltimore, MD 21201. JO# 9047105.**

ORAL BIOLOGY RESEARCH POSITIONS

The Forsyth Dental Center invites applications for tenure-track, full-time research positions. Applicants should have a doctoral degree and experience in molecular biology methods. Successful applicants are expected to develop their own independently funded research programs in oral biology. Curriculum vitae and summary of accomplishments should be sent to: **Dr. D. I. Hay, Forsyth Dental Center, 140 Fenway, Boston, MA 02115.** *The center is an Affirmative Action/Equal Opportunity Employer.*

STAFF RESEARCH CHEMIST. Oversee original research on new and modification of existing organic pigments and processes with emphasis on heterocyclic pigments. Conceptualize, propose, and carry out research on new or modified processes to alter new or existing pigment properties with respect to durability, dispersibility, rheology, heat stability. . . . Supervise trained technicians and as a team safely operate laboratory. Collaborate with Technical Service Laboratory in evaluation of new and modified pigments. Stay in contact with pilot plant and full-scale plant for scale-up studies to semi-commercial and commercial pigment quantities. Participate in development strategies for new products. Visit and explain to customers new developments in pigment field. Requires a Ph.D. in organic chemistry or chemistry and 3 years of experience in the job or 3 years of experience in organic chemical pigments research with industrial applications. Experience in organic chemistry with emphasis on heterocyclic chemistry systems. Experience in paint, plastic, and ink pigments include synthesis of such pigments and their incorporation and evaluation in the respective systems. Experience in economic and strategic aspects of pigment business. Forty hours per week; \$64,250 per year. Send résumé to: **David A. Lann, 3301 Lancaster Avenue, Wilmington, DE 19805. JO#DE804138.**

COURSES AND TRAINING

CLINICAL CHEMISTRY FELLOWSHIPS at Mayo Clinic. Seeking applicants for 1- or 2-year fellowships in training programs directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry or for subspecialty certification by the American Board of Pathology. Applications on file by July (pathology) or October (postdoctoral) 1991 will be considered for appointment in July of 1992. Contact: **Mary F. Burritt, Ph.D., Division of Laboratory Medicine, Mayo Clinic, Rochester, MN 55905,** for more information. *Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.*

COURSES AND TRAINING

CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND PHYSICAL SCIENTISTS

A 1-week intensive **COURSE** sponsored by the Massachusetts Institute of Technology (MIT), 17 to 21 June 1991, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic principles of cardiovascular physiology, cardiovascular medicine, diagnostic and therapeutic technologies. Contact: **Director of the MIT Summer Session, 617-253-2101.**

ANNOUNCEMENTS

ALFRED P. SLOAN FOUNDATION

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR STUDIES OF EVOLUTION. Up to ten awards. Total compensation: \$25,000 plus \$10,000 research funds per year. Tenable for 1 to 2 years at universities or nonprofit research institutions in the United States or Canada. Applicant should be prospective or recent Ph.D. in molecular biology, evolutionary biology, or related discipline. Deadline: 6 September 1991. For details, contact: **Dr. Michael S. Teitelbaum, Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, NY 10111. Telephone: 212-649-1649.**

ORPHAN DRUG RESEARCH GRANTS. Grants are available from the National Organization for Rare Disorders (NORD) for clinical research on the care and treatment of patients with rare diseases. Grant awards are up to \$20,000 per year for either 1 or 2 years. Two-page letter of intent due by 30 June 1991; final proposal by 31 October 1991. For guidelines, contact: **Grants Administrator, National Organization for Rare Disorders, P.O. Box 8923, New Fairfield, CT 06812-1783. Telephone: 203-746-6518.**

AMERICAN EPILEPSY SOCIETY AWARDS PROGRAM

The American Epilepsy Society announces the 1991 Awards Program designed to encourage and reward clinical and basic science investigators whose research contributes importantly to understanding and conquering childhood onset epilepsy.

CATEGORY 1 AWARDS: Two annual awards of \$100,000 each will be made to senior individuals who have a distinguished history of research achievements and professional excellence related to pediatric aspects of epilepsy. One award will go to a clinical investigator and the other to a basic scientist.

CATEGORY 2 AWARDS: Three annual awards of \$50,000 each will be made to individuals whose research holds promise of leading to important advances in the understanding, diagnosis, and treatment of childhood onset seizures and epilepsy. At least one award in this category will go to a clinical investigator.

Candidates for the American Epilepsy Society Awards are nominated by their peers. The American Epilepsy Society has the sole responsibility for selection of recipients. Nomination forms are available from the American Epilepsy Society. Deadline for completed nominations is 1 July 1991. Awards will be announced at the annual meeting of the American Epilepsy Society in Philadelphia, 6 to 11 December 1991.

Contact: **The American Epilepsy Society Awards Program, AES Executive Office, 638 Prospect Avenue, Hartford, CT 06105-4298. Telephone: 203-232-4825.**

The American Epilepsy Society Awards Program has been made possible by funds generously provided by the Milken Family Medical Foundation.

MARKETPLACE

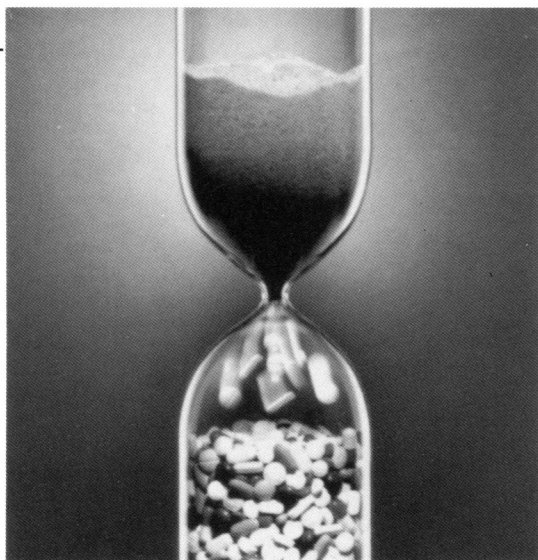
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A TIME FOR ACHIEVEMENT

The opening of Glaxo Inc.'s 1.5 M square foot, \$350 million Girolami Research Center in Research Triangle Park, North Carolina, represents a monumental commitment in the pharmaceutical industry to the discovery of drugs for unmet patient needs. The Glaxo Research Institute, on relocating to this new R&D complex, will focus on expanding programs. As a result of this expansion, we are seeking Scientists for the following positions:

RESEARCH INVESTIGATOR *Computational Chemistry*

The individual for this position will be responsible for establishing and implementing computational chemistry/molecular modeling research primarily on small molecules with some applications to macromolecules. The applicant should have a Ph.D. and expertise in quantum mechanics, molecular mechanics, and statistical mechanics with 3-5 years' relevant experience in these areas. A strong background in organic chemistry and the ability to work as part of a team is highly desirable.

The Computational Chemistry Group functions as part of a multidisciplinary team with close interactions with medicinal chemists and structural chemists. The computational chemistry effort is well supported by a VAX cluster, a large Silicon Graphics network, and direct access to a CRAY YMP-432.

Please refer to Job #9141AMRI-SC on all resumes.

SENIOR SCIENTIST *Bioanalytical Separations*

Applications are invited for the position of Senior Scientist in Bioanalytical Separations. Candidates should have a Ph.D. in Analytical Chemistry or Biochemistry with three or more years' experience in HPLC and capillary electrophoresis of biomolecules. Duties will include research in the separation of proteins, glycoproteins, and polynucleotides on the micro-scale and coordination with the mass spectrometry group to interface the separation and mass spectrometric instruments.

Please refer to Job #9141AMSS-SC on all resumes.

POSTDOCTORAL POSITIONS

As part of continued commitment to excellence in scientific research, we have an established and successful program for Postdoctoral Fellows. We maintain a stimulating environment with an active seminar program and have strong interactions with neighboring universities. Publication of research results is strongly encouraged. Openings for suitably qualified candidates exist in the following areas:

Computational Chemistry

The applicant should be familiar with quantum mechanics, molecular mechanics, and statistical mechanics. Opportunities exist for research on the development of new methodologies in the areas of free energy perturbation, and 3D structure searching. Application of these methods to modified oligonucleotides in triplex and antisense systems will be the main focus of the studies.

Please refer to Job #9141T205-SC on all resumes.

Mass Spectrometry

Experience in biopolymer mass spectrometry or protein biochemistry desirable to study electrospray ionization mass spectrometry of proteins and glycoproteins. Instrumentation includes a Sciex API-III triple quadrupole and JEOL SX-102, double focusing sector mass spectrometer.

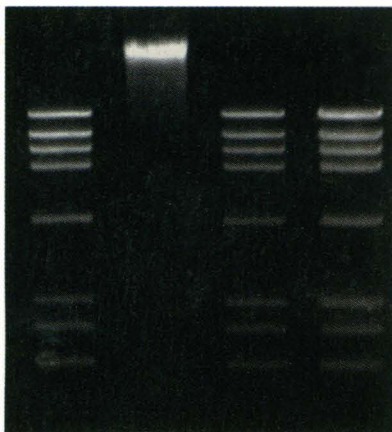
Please refer to Job #9141T703-SC on all resumes.

Our Research Triangle Park, NC location (near Raleigh, Durham and Chapel Hill) offers a lot more for people who seek a well-rounded, comfortable lifestyle. This world famous scientific, industrial, and academic community affords access to respected universities, beautiful residential areas, major retail centers, excellent health care and abundant cultural and recreational facilities. Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction.

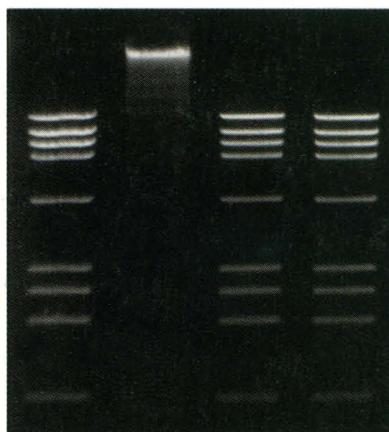
Send your resume, including salary history, INDICATING THE CORRESPONDING JOB #, to: **Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

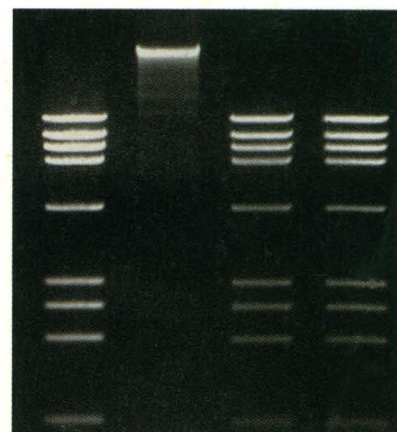
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