Products & Materials

SDS as Solution

Sodium dodecyl sulfate (SDS) is now available as a ready-to-use solution. The premixed SDS in solution means there is no powder to weigh out and no mess to clean up. The 20% (w/v) stock solution can be diluted to the needed concentration. The activity and stability of the SDS in solution is guaranteed for a year. Boehringer Mannheim Biochemicals. Circle 462.

Solar-Powered pH Meter

The Solar-Powered pH Meter has no batteries to replace. The pocket-sized meter features a half-inch liquid crystal display and a replaceable electrode with a 39-inch cable that makes it easy to immerse in any solution. Calibration, slope, and temperature



adjustment screws maximize accuracy to 0.02 over 0 to 14.0 pH range. The meter is powered by average laboratory or outdoor light conditions and features battery back-up reserve for up to 200 hours. The kit includes the meter, a polymer pH/reference electrode, and a padded carrying case with belt strap. EXTECH Instruments. Circle 463.

New Separation Medium

NycoPrep Mixer is a sterile and pyrogentested solution designed for use in the isolation of mononuclear cells. To isolate mononuclear cells, the separation medium is mixed directly with whole blood and centrifuged. No layering of the sample is necessary. After centrifugation the mononuclear cells are in the supernatant and can be readily harvested in high yield and purity. The process does not include polysaccharides, thus avoiding possible modification of the cells as a result of the interaction of polysaccharides with cell surface receptors. NYCOMED PHARMA. Circle 464.

Monoclonal Antibodies

A line of fluorochrome-conjugated monoclonal antibodies (MAbs) to rat T cell markers are suitable for use in flow cytometry. They include MAbs to rat Thy-1 (also available as an FITC conjugate), rat CD4 (also available as an R-PE conjugate), and rat CD8 (also available as both FITC and R-PE conjugates). Caltag Laboratories. Circle 465.

Interleukin-2 (IL-2) binds to two distinct receptor molecules. This MAb inhibits IL-2 binding to one of them, the IL-2 receptor β (IL-2R β , p75) chain. Janssen Biochimica. Circle 466.

A line of MAbs to murine cytokines includes: anti-murine IL-2, anti-murine IL-3, anti-murine IL-4, anti-murine IL-5, antimurine IL-6, anti-murine TNF alpha, antimurine interferon gamma, and anti-murine GM-CSF. These antibodies are offered without preservatives in 500- μ g vials at 1 mg/ml in a sterile, carrier-free liquid. Endogen. Circle 467.

Programmable Temperature Controller

These programmable temperature controllers for rapid and accurate heating and cooling of samples feature easy programming, a solid-state Peltier junction-based thermal control system, all-electronic heating and cooling, liquid crystal display of program, slope, time, and temperature and temperature range of 0° to 100°C. Model PTC-60 holds 60 0.5-ml microtubes and Model PTC-96 holds one 96-well flexible U-bottom microtiter plate. Owl Scientific Plastics. Circle 468.

Protein Analysis Kit

MICRO-COAT Protein Analysis Kit for Applied Biosystems' capillary electrophoresis systems provides a simple procedure for analyzing a broad number of proteins in a wide pH range. Capillary electrophoresis allows quantitation in real time using a minimal amount of sample. Proteins can be analyzed in their native state under nondenaturing conditions. In contrast to native



gel techniques, the kit offers minimal prerun preparation, direct detection, and nondestructive sample analysis. Applied Biosystems. Circle 469.

Population Software

POPSYS Series 2 software is used to analyze and build models of interacting biological populations, including plants and herbivores, predators and prey, and those involving competition and mutualism. POPSYS models are built around basic ecological theory and can be used to teach the principles of population and community dynamics, study the statistics and dynamics of interacting populations, predict population trends, and test population management policies such as optimal harvesting and pest control. The program runs on IBM-compatible computers with graphics adapters. Ecological Systems Analysis. Circle 470.

Literature

1991 Chromatography Users Catalog is a 240-page publication that contains information on products and materials including columns for gas and liquid chromatography, syringes, paper, chemical samples, and supplies for a variety of instruments. Hewlett-Packard. Circle 471.

The 1991 Sigma General Catalog is a 2,144-page resource of more than 27,000 chemicals, biochemicals, and related products. This year's catalog contains more than 2,000 new products and, for the first time, most chemical product listings include the molecular weight, molecular formula, and Chemical Abstracts Service registry number. Sigma Chemical Company. Circle 472.

The 1991 Sigma Radiochemicals Catalog lists more than 350 radiolabeled products and reagents including a new line of cell culture-tested radiochemicals in a convenient multi-dose vial. Sigma Chemical Company. Circle 473.

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

Personnel Placement

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 needed to fit logo in space.

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

The Department of Biological Sciences of the University of Windsor requires an ASSISTANT PROFES-SOR for a 2-year limited term appointment to coordinate its Co-op Program on Great Lakes Studies. Starting date is January 1992 or later.

The candidate must have a Ph.D. and a demonstrated research record in aquatic ecology, be qualified to teach courses relevant to the program, and be prepared to develop appropriate contacts for placement of co-op students in industrial and government laboratories for their work sessions. Preference will be given to a candidate with a background in ecotoxicology.

Applicants should send curriculum vitae, a statement of research interests, and the names of three referees to: Dr. M. Petras, Department of Biological Sciences, University of Windsor, Windsor, Ontario N9B 3P4, Canada. Consideration of applications will begin on 23 September 1991. In accordance with Canadian immigration requirements, this advertisement is directed in the first instance to Canadian citizens and permanent residents. The University of Windsor is committed to Equity in Employment. Female candidates are especially encouraged to apply.

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

Under the auspices of the NSF EPSCoR II Program and the State of Arkansas, the University of Arkansas for Medical Sciences (UAMS) is expanding in the area of neuroscience with the ultimate goal of forming a Neurobiology Research Center. Applications are requested for two tenure-track positions at the ASSISTANT **PROFESSOR** level. The successful candidates will be expected to develop strong independent research programs, to participate in multi-investigator collaborative efforts, and to teach medical/graduate students. Qualifications include a Ph.D. degree and at least 2 years of postdoctoral experience. Appointments will be made in either the Department of Anatomy or the Department of Physiology and Biophysics. The two individuals to be appointed must have experience in the following areas: molecular neurobiologist—regulation of gene expression, and cell neurobiologist—in situ hybridization, mRNA expression, cytoimmunology. Candidates should send curriculum vitae, a statement

Candidates should send curriculum vitae, a statement of their research interests and plans, and the names of three references to: **Professor E. Garcia-Rill, Program Director and Chairman, Search Committee, Slot 510, University of Arkansas for Medical Sciences, 4301** West Markham Street, Little Rock, AR 72205.

West Markham Street, Little Rock, AR 72205. Deadline for receipt of applications for full consideration is 15 September 1991. UAMS is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK ASSISTANT PROFESSORS at University of Pennsylvania. The Section of Biochemistry in the Department of Animal Biology (School of Veterinary Medicine) invites applications for two tenuretrack faculty positions in the general areas of cell and molecular biology. The candidates should have the potential for developing an independent research program in a strong academic setting. The positions offer opportunities for collaborative research and participation in various graduate and undergraduate programs throughout the university. The University of Pennsylvania is an Equal Opportunity Employer. Send curriculum vitae including a brief description of research and names of three references to: Dr. Narayan G. Avadhani, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104–6046.

REPRODUCTIVE PHYSIOLOGIST

The Department of Veterinary Physiology and Pharmacology, College of Veterinary Medicine, Texas A&M University, invites applications for a 12-month, tenuretrack, budgeted, ASSISTANT or ASSOCIATE PRO-FESSOR position in reproductive physiology. Preference will be given to applicants with experience in molecular biology and embryo micromanipulation. Ph.D. and postdoctoral experience are required. A D.V.M. degree is desirable but not mandatory. Send applications with curriculum vitae, research and teaching interests, and the names, addresses, and telephone numbers of at least three references to: Dr. Duane C. Kraemer, Associate Dean, College of Veterinary Medicine, Texas A&M University, College Station, TX 77843–4461. Telephone: 409-845-5092. FAX: 409-845-5088. Review of applications will begin immediately and continue until position is filled. Texas A&M is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

MICROBIOLOGIST/VIROLOGIST

The West Virginia School of Osteopathic Medicine (WVSOM) invites applications for a tenure-track position at the **ASSISTANT OR ASSOCIATE PROFES-SOR** level. Qualified applicants must have a Ph.D. in virology or microbiology with virology specialty. Candidates with teaching experience are preferred. Research opportunities are available and encouraged. Teaching responsibilities include team-taught general microbiology plus general and medical virology to medical students.

Applicants should submit a letter describing teaching and research experience and interests, curriculum vitae, and three current letters of reference to: Chairperson, Microbiology Search Committee, c/o Personnel Office, West Virginia School of Osteopathic Medicine, 400 North Lee Street, Lewisburg, WV 24901. Applications will be accepted until the position is filled, with an anticipated starting date of September 1991.

Women and minorities are encouraged to apply. WVSOM is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR. The Department of Pharmacology at the University of South Florida College of Medicine (USFCOM) invites applications for tenure-track faculty positions at the assistant/ associate professor level, depending on experience. Applicants must have a Ph.D. or equivalent in pharmacology, neuroscience, or a related discipline with a minimum of 3 years postdoctoral experience. Individuals are expected to establish independent research programs, obtain extramural grant support, and contribute to teaching medical and graduate students. Under new leadership, the department is seeking outstanding scientists working within the broad area of neuropharmacology, with an emphasis on individuals with a strong background in molecular neurobiology and an interest in aging. Applicants should submit curriculum vitae, statement of research interests and future plans, and the names of three references to: Lynn Wecker, Ph.D., Professor and Chair, Department of Pharmacology, MDC Box 9, USFCOM, 12901 Bruce B. Downs Boulevard, Tampa, FL 33612–4799. Applications must be received by 30 September 1991. The University is an Affirmative Action/ Equal Opportunity Employer.

CLEVELAND CLINIC FOUNDATION DEPARTMENT OF HEART AND HYPERTENSION RESEARCH FACULTY POSITIONS

The Department of Heart and Hypertension Research has immediate openings for research scientists at the ASSISTANT, ASSOCIATE, and PROFESSOR levels to pursue independent, competitive scientific research. The department is currently involved in basic and clinical research with particular strength in molecular and structural biology as well as cell and integrated physiology. Applicants holding a doctoral degree with strong training and experience in any area of cardiovascular biology are invited to apply, although particular consideration will be given to highly qualified applicants with experience in structural biology and biophysics for the study of protein interactions; electrophysiology and molecular biology; and conscious-animal integrated physiology. Salary and appointment will depend on experience and qualifications. Send curriculum vitae and a short statement of research interests to: Dr. Robert M. Graham, Chairman, Department of Heart and Hypertension Research, Cleveland Clinic Foundation/FF3-20, 9500 Euclid Avenue, Cleveland, OH 44195–5071.

ENDOWED PROFESSORSHIP IN ARTHRI-TIS RESEARCH. The University of Colorado School of Medicine is seeking candidates for the Dr. Charley J. Smyth Professorship in Arthritis Research. This is a full-time research position with clinical work and teaching not required. The individual may be appointed at the level of either ASSOCIATE PROFESSOR or FULL PROFESSOR. Both M.D. and Ph.D. candidates who are performing basic research related to the rheumatic diseases, particularly women and minority candidates, are encouraged to apply. Please send a letter of interest, curriculum vitae, and the names of three references to: Dr. William P. Arend, Division of Rheumatology, B-115, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. Equal Opportunity/Affirmative Action Employer.

The Department of Microbiology and Immunology of Queen's University at Kingston invites applications for a position of an ASSISTANT PROFESSOR from individuals with a strong interest in the molecular basis of animal virus replication in cell or animal systems. Candidates must have a Ph.D. with postdoctoral experience in molecular virology. The successful applicant will be expected to develop and maintain an independent re-search program and to participate in graduate and un-dergraduate teaching. The department currently has active research programs in immunology, bacteriology, molecular virology, and infectious disease. The virology program includes studies on the fundamental mechanisms of viral gene expression and regulation, biochem-istry and molecular biology of signal transduction, and molecular aspects of insect virus virulence factors. Appli-cants should forward curriculum vitae, outline of re-search interests, and the names of three referees to: **Dr**. P. Aston, Department of Microbiology and Immu-nology, Queen's University, Kingston, Ontario, K7L 3N6 Canada, In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Queen's University has an Employment Equity programme and encourages applications from all qualified candidates, including women, aboriginal peoples, people with disabilities, and visible minorities. Clos-ing date is 30 September 1991.

ASSOCIATE/FULL PROFESSOR. The Department of Microbiology and Immunology of the Texas College of Osteopathic Medicine (TCOM) is seeking applicants for a faculty position at the level of associate professor or higher depending on qualifications. TCOM is a state-supported medical school housed in new, wellequipped facilities, and is affiliated with the University of North Texas. Applicants should have a proven record of accomplishments as a postdoctoral fellow or a faculty member. Teaching duties include instructions of medical and graduate students. First priority will be given to applications in the area of molecular immunology. However, applications in molecular microbiology and molecular biochemistry will also be considered. Send curriculum vitae, a summary of research interests and goals, and three references by 1 September 1991 to: Dr. Rafael Alvarez-Gonzalez, Search Committee Chairman, Department of Microbiology and Immunology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107–2690.

In the Faculty of Science of the University of Zürich a newly created **PROFESSORSHIP IN ENVIRON-MENTAL SCIENCES** is to be filled.

The responsibilities comprise research in a field of environmental sciences as well as the administration of interdisciplinary (interfaculty) coordination. The teaching duties involve active participation in already existing programs at both undergraduate and postgraduate levels. The successful candidate will be expected to give lectures in German within a reasonable period after appointment.

Candidates should show a successful research record in some field of natural science as well as the ability and experience in dealing with environmental problems. They should be willing to direct and coordinate interdisciplinary research projects.

ciplinary research projects. Holders of an advanced degree with proven academic experience are asked to send curriculum vitae, list of publications, and a short description of their research interests before 30 September 1991 to: Dekan der Philosophischen Fakultät II der Universität, Winterthurerstrasse 190, CH-8057 Zürich, Switzerland.

CYTOGENETICIST. The Department of Pathology, University of Arkansas for Medical Sciences, is recruiting for a tenure-track assistant professor. Applications are invited for the position of ASSOCIATE DIRECTOR in a rapidly expanding full service clinical cytogenetics laboratory. In addition to helping direct the laboratory, the successful candidate will be expected to develop an independent research program in the area of molecular cytogenetics. Applicants should send their curriculum vitae and names and addresses of three references to:

Jeffrey Sawyer, Ph.D. Cytogenetics Laboratory Arkansas Children's Hospital 800 Marshall Street Little Rock, AR 72202–3591 Telephone: 501-370-1327

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

POSITIONS OPEN

UNIVERSITY OF WASHINGTON VISITING PROFESSOR IN MARINE BOTANY

Visiting professor sought to conduct research and to teach part of a graduate marine botany course at Friday Harbor Laboratories during summer 1992 and a seminar/specialty course in the Department of Botany spring or summer 1992. Excellent sabbatical opportunity. Contact: Dr. J. Robert Waaland, Chair, Visiting Marine Botanist Committee, Department of Botany KB-15, University of Washington, Seattle, WA 98195. Telephone: 206-543-1942; FAX: 206-685-1728. Application deadline: 30 September 1991. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

VICE PRESIDENT, PROGRAMS

Winrock International, a leading nonprofit agricultural and rural development firm, is seeking a vice president, programs to plan program development, implement strategies, and provide leadership and guidance to directors and managers. Ph.D. in agriculture, natural resources, forestry, or rural social science, and minimum of 10 years of experience managing agricultural research or development programs, including 5 years in a developing country, required. Project proposal preparation; contract negotiation; knowledge of agricultural, environmental, and rural development problems; and excellent management/leadership skills are all essential. Salary commensurate with experience. Excellent benefits. Send cover letter, résumé, and three references by 31 August 1991 to: Susan Dewey, Winrock International, Route 3, Box 376, Morrilton, AR 72110. Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

The Max Planck Institute for Psychiatry, Clinical Institute, seeks a

GROUP LEADER

for its basic science research unit examining the neural basis of opioid and alcohol addiction.

Requires: Ph.D. with minimum of 3 years of postdoctoral training; extensive experience in behavioral pharmacology and neurochemistry; familiarity with pharmacogenetics and training of graduate and postdoctoral students.

Applications should be sent to: **Professor Dr. Florian** Holsboer, Max-Planck-Institut für Psychiatrie, Klinisches Institut, Kraepelinstrasse, 10, 8000 München 40, Germany.

BIOLOGICAL SAFETY OFFICER

The University of Wisconsin-Madison seeks biologist to lead professional staff in biological safety office to ensure safe use of infectious microorganisms, biological toxins, and regulated plant and animal materials in laboratories, clinics, and field situations by faculty, students, and staff and to coordinate employee occupational safety programs. Ph.D. required, preferably in microbiology, infectious disease, or molecular biology. Must have at least 10 years of experience. Knowledge of pertinent federal guidelines and prior experience as biological safety officer highly desirable. For full consideration, submit curriculum vitae, professional statement, and names, addresses, and telephone numbers of three references by 15 August 1991 to: Dean, Graduate School, Biosafety Officer Search Committee, University of Wisconsin, 500 Lincoln Drive, Madison, WI 53706. Telephone: 608-262-1044. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.

FACULTY TEACHING POSITION. The New York Chiropractic College is pleased to announce the relocation of its campus to the beautiful Finger Lakes Region in Seneca Falls, New York. The Division of Pre-Clinical Studies invites applications for a full-time teaching position in PATHOLOGY. Applicants should have a Ph.D. in the appropriate discipline, or an M.D. degree and also should be committed to excellence in teaching. Interested individuals should send cover letter, curriculum vitae, and names of three references as soon as possible, but no later than 1 August 1991 to:

Barbara J. Davis, Ph.D. Director, Pre-Clinical Studies New York Chiropractic College P.O. Box 800, Seneca Falls, NY 13148

The New York Chiropractic College is an Equal Opportunity Educator and Employer.

POSITIONS OPEN

IMMUNOLOGY PROGRAM DIRECTOR CANCER CENTER OF THE MEDICAL COLLEGE OF WISCONSIN

The Cancer Center of the Medical College of Wisconsin seeks an established investigator to develop and expand the Immunology Programs. The Cancer Center is undergoing rapid expansion and provides unique opportunities for interaction and program development with investigators in basic and clinical disciplines. Laboratory and office space will be located in a recently completed research building at the Medical College.

and once space will be located in a recently completed research building at the Medical College. Applicants should have an established ongoing research program in an area relevant to the study of host-malignant cell interactions. Appointment to the Cancer Center will include a joint appointment in an appropriate medical school department. Deadline for applications: 1 September 1991.

Applicants should send a statement of research inter-

Ernest C. Borden, M.D. Director Cancer Center of the Medical College of Wisconsin 8701 Watertown Plank Road Milwaukee, WI 53226

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

FACULTY POSITIONS NEW YORK MEDICAL COLLEGE

Applications are invited for tenure-track faculty positions in the Departments of Pathology/Experimental Pathology. Appointment at either the **ASSISTANT OR ASSOCIATE PROFESSOR** level will be considered. Applicants must have a Ph.D. or M.D. degree and at least 2 years of postdoctoral training and show a firm commitment to an independent research career. Applicants should have a documented record of research productivity and demonstrated ability to successfully obtain research funding from extramural sources. Those with experience in molecular biology and an interest in cardiovascular or tumor biology are encouraged to apply. Responsibilities include participation in the School of Medicine curriculum and in departmental and interdepartmental graduate training programs. Interested applicants should send curriculum vitae to:

Dr. Michael Stemerman Departments of Pathology/Experimental Pathology Basic Science Building New York Medical College Valhalla, NY 10595

An Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY

The Department of Biochemistry at the University of Texas Health Science Center at San Antonio invites applications for several 12-month, state-funded, tenuretrack faculty positions at the ASSISTANT OR ASSO-CIATE PROFESSOR level. Candidates with research expertise in any area of contemporary biochemistry will be considered. Special consideration will be given to candidates with research interests in the following areas:

• Biochemistry/Cell Biology: receptors and signal transduction, ion channels, intracellular protein targeting, growth factors.

Molecular Biology/Genetics: gene structure, function, and regulation including transcriptional, translational, and post-translational regulatory mechanisms.

• Macromolecular Structure: high resolution structure and dynamics of macromolecules in solution or the solid state.

Interested applicants should send curriculum vitae, a research prospectus, and the names of three references to:

Faculty Search Committee Department of Biochemistry The University of Texas Health Science Center at San Antonio 7703 Floyd Curl Drive San Antonio, TX 78284–7760

The deadline for applications is 15 September 1991. An Affirmative Action/Equal Opportunity Employer.

More than 150,000 people paid to see your ad in SCIENCE. Classified Advertising Department telephone: 202-326-6555. FAX: 202-682-0816.

NATIONAL INSTITUTE ON AGING (NIA) National Institutes of Health RESEARCH PROGRAM DIRECTOR

NIA's Geriatrics Program seeks a director for its extramural pathophysiology research program. Activities include planning and implementing research initiatives through Program Announcements and Requests for Applications, and administrative oversight of proposals and grants. Doctorate or equivalent and research experience relating to causal mechanisms of one or more major diseases of aging (e.g. cancer, cardiovascular diseases, musculoskeletal diseases) required. Background in aging and familiarity with NIH desirable. Individuals may be hired through the Civil Service or Public Health Service Commissioned Corps, at salaries commensurate with gualifications and experience. Physicians may be eligible for bonus of up to \$20,000. Call Dr. Evan Hadley at (301) 496-6761 about scientific and administrative aspects of this position.

To apply, send Application for Federal Employment (SF-171) and CV to: **Ms.** Christine Hartz, 9000 Rockville Pike. Building 31, Rm. 2C11, Bethesda, **MD. 20892, by September 30, 1991.** Call Ms. Hartz at (301) 496-5347 about application procedures, salaries, and benefits. U.S. citizenship required.

NIH is an Equal Opportunity Employer

Project leader in Neurobiology, Biocenter, University of Basel, 4056 Basel, Switzerland

A five-year appointment at a level corresponding to Assistant-Professor is available now in the Department of Pharmacology for independent research in molecular mechanisms of neuronal development. Applicants should have had two or more years of postdoctoral experience and should enclose a Curriculum Vitae, a List of Publications. a brief one-page statement of Research Interests and the names of three referees.

Applications should be submitted by August 15. 1991 to Prof. J. G. Nicholls, Department of Pharmacology, Biocenter, University of Basel, Klingelbergstrasse 70, CH-4056 Basel, Switzerland.

For enquiries: Phone: 0041/61 267 22 31 0041/61 261 67 60 Fax:

A Lot Of Companies Talk About The Power Of Teamwork.

SCIENTIST-IMMUNOLOGY

The ideal candidate will play a vital role in our Human Cellular Immunology Group, working on T-cell reactivity of allergens and epitope definition. You will initiate research into basic allergic response mechanisms, including T-cell control of B-cell activation and T-cell energy. This is an ideal opportunity to direct a personalized research program consistent with ImmuLogic's strategic scientific plan. We require a PhD or MD in a medical science, specializing in Immunology, with 2-6 years of postdoctoral experience and a strong record of scientific achievement in human immune systems. Broad-based knowledge of cellular activation mechanisms is preferred.

SCIENTIST-PROTEIN CHEMISTRY

As a key member of our Protein/Peptide Chemistry Group, you will participate in both independent and collaborative protein chemistry projects. You should possess a PhD in Chemistry or Biochemistry and 4 + years of research experience or the equivalent, plus proven knowledge of protein sequencing, chemical modification, biophysical techniques and the purification, derivation and modification of proteins. Recombinant protein familiarity is desirable

SCIENTIST—PEPTIDE SYNTHESIS

Another position in the Protein/Peptide Chemistry Group exists for a project leader in peptide synthesis and purification. The successful candidate will have a PhD in Chemistry or Biochemistry and 4 + years of research experience or the equivalent, including solid phase peptide synthesis with t-BOC and FMOC chemistries. Medicinal chemistry experience is helpful.

SCIENTIST—PROCESS DEVELOPMENT

In this key role, you will be responsible for the development of large-scale recovery and purification of peptides and proteins, including process optimization, technology transfer and process validation activities. Additionally, you will develop production procedures and product specifications. The ideal candidate for this hands-on position must possess an MS or PhD in a related scientific discipline or the equivalent, and extensive knowledge and experience in the development of scaleable recovery processes for peptides and recombinant proteins.

In addition to a competitive salary and excellent benefits, ImmuLogic Pharmaceutical provides an outstanding professional working environment with state-of-the-art facilities and a unique opportunity to significantly broaden your scientific and technical expertise. For immediate consideration, please forward your CV or resume, and cover letter, indicating the position of interest, to: Mr. Kevin S. Lawler, Director of Human Resources, ImmuLogic Pharmaceutical Corporation, One Kendall Square, Building 600, Cambridge, MA 02139. We are an Equal Opportunity Employer.

To fully understand the power of teamwork, you have to see it in action. At ImmuLoaic, everyone is focused on the same goal: to develop innovative phar-

ome See

maceuticals and get them to the people they're designed to help. The results are clear: less than three years after beginning research on an allergy vaccine, our first product will be entering clinical trials in 1992. And more will follow.

We are now building on this momentum. At our labs in Cambridge, MA and Palo Alto, CA, we are applying the same focused team approach that has earned ImmuLogic a solid reputation for outstanding science and success. And with the recent completion of our initial public stock offering, we continue to position ourselves for a successful future.

Come experience the power of teamwork in your own career, at ImmuLogic. These current opportunities are located in Cambridge, MA:



FACULTY POSITION IN PHARMACOLOGY/TOXICOLOGY

A tenure-track position is available immediately in the Department of Pharmacology and Toxicology at the University of Mississippi Medical Center in Jackson, Mississippi. Applicants should have an M.D. or Ph.D. degree and should have experience in the use of fluorescence and electron microscopy in areas such as neuro-pharmacology/toxicology, developmental pharmacology/ toxicology, immunopharmacology, or macromolecular morphology. Salary and rank commensurate with education and experience. The successful applicant will be expected to develop an independent, extramurally funded research program and participate in the teaching activi-ties of the department. Interested persons should send curriculum vitae and a brief description of research interests and arrange for three letters of reference to be sent to: Beth Hoskins, Ph.D., Chairperson of Search Committee, Department of Pharmacology and Toxi-cology, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216–4505. Equal Opportunity Employer, M/F/H/V.

One-year medical-leave REPLACEMENT IN BI-OLOGY has just opened at Luther College. Minimum qualification: master's degree in one of the biological sciences. Responsibilities include participation in teamtaught general biology course plus an advanced biology course each semester commensurate with the individual's interests and qualifications. Expertise in two of the following course areas required: invertebrate biology, genetics, botany, cell biology, and/or anatomy. Applica-tion, curriculum vitae, letters of recommendation, tran-scripts, and placement files should be sent to: John L. Tjostem, Head, Department of Biology, Luther College, Decorah, IA 52101. Telephone: 319-387-1554. An Af-firmative Action/Equal Employment Opportunity Employer.

POSTDOCTORAL POSITIONS. Are open to study the environmental regulation of microbial gene Apression and signal transduction as well as the genetic and molecular basis of biodegradation of synthetic com-pounds. Write with a copy of your curriculum vitae to: Dr. A. M. Chakrabarty, Department of Microbiology (M/C 790), University of Illinois at Chicago, P.O. Box 6998, Chicago, IL 60680. expression and signal transduction as well as the genetic

POSTDOCTORAL POSITION. Available immediately to study cancer chemoprevention and molecular mechanisms of skin tumor promotion in transgenic mice. Experience in signal transduction pathway and molecular biology techniques is desired. Send curriculum vitae with three references to: Professor Hasan Mukhtar, Depart-ment of Dermatology, Case Western Reserve Univer-sity, Cleveland, OH 44106.

POSTDOCTORAL POSITION. Molecular biology, University of California, Irvine (UCI). Long-term project regarding the mechanisms of intestinal inflammation. Must have training in molecular biology. Knowledge of INTEGRINS and intestinal intrapithelial lym-phocytes desirable. Write to: Dr. D. Hollander, C340 Medical Sciences Building I, University of California, Irvine, CA 92717. UCI is an Affirmative Action/Equal **Opportunity** Employer.

POSTDOCTORAL POSITION. Available immediately to study the regulatory role of phosphorylation on the function and metabolism of tau and other neuronal cytoskeletal proteins involved in Alzheimer's dis-ease. Experience in protein biochemistry is desirable. Excellent salary and benefits. Send curriculum vitae and the names of three references to: Dr. Gail V. W. Johnson, Department of Cell Biology, SC911, Uni-versity of Alabama at Birmingham, Birmingham, AL 35294-0017.

POSTDOCTORAL POSITIONS. Are available for the study of protein-DNA interactions, using biophysi-cal, biochemical, and molecular biological approaches. Current projects include studies of the interaction with and unwinding of DNA by helicases and helix destabi-lizing proteins. Send curriculum vitae and the names of three references to:

T. M. Lohman **Biochemistry and Molecular Biophysics** Washington University School of Medicine Box 8231 660 South Euclid Avenue St. Louis, MO 63110

POSITIONS OPEN

POSTDOCTORAL POSITION. A postdoctoral position is available to study mechanisms and conditions of P450 expression in mammalian hepatocytes in vitro. Candidate should have recently obtained a Ph.D. in one of the biomedical disciplines related to our research. Experience in basic molecular biology techniques, including protein-DNA interactions, protein purification, and in situ hybridization is required. This project is in development with two institutions; Department of Paaffiliate, and the Department of Cancer Pharmacology, Dana-Farber Cancer Institute, a Harvard affiliate. Interested candidates should send curriculum vitae to: Hugo O. Jauregui, M.D., Ph.D., Rhode Island Hospital, 593 Eddy Street, Aldrich 702, Providence, RI 02903. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MICROBI-AL PATHOGENESIS. Available to study genetics of virulence in medically important fungi. Strains of *Blastomyces dermatitidis* exhibiting high or low virulence are the cus of study. Approaches involve subtractive hybridization of yeast nucleic acid, yeast transformation, and characterization of genes and products associated with virulence. Experience in yeast genetics or molecular biology required. Send résumé and names of three references to: Bruce Klein, University of Wisconsin, 600 Highland Avenue, Room H4/464, Madison, WI 53792

POSTDOCTORAL POSITION HUMAN MOLECULAR GENETICS UNIVERSITY OF UTAH

Isolation of the gene that causes sudden death from cardiac arrhythmias using mapping and mutational anal-yses [Science 252, 704-706 (1991)]. Send curriculum vitae to: Mark Keating, University of Utah, Department of Human Genetics, Eccles Institute of Human Genetics, Salt Lake City, UT 84112. Telephone: 801-581-8904. FAX: 801-585-3501.

TWO POSTDOCTORAL POSITIONS. Available immediately for studies in one of two areas: (i) cellular regulation of epithelial chloride channels (normal and in CF) and (ii) hormonal and cytoskeletal regulation of intestinal Na,K-ATPase (normal and in diabetes). Indicate area of interest and send curriculum vitae and names and addresses of three references to: Michael Field, M.D., P&S 10-508, College of Physicians and Sur-geons, Columbia University, 630 West 168th Street, New York, NY 10032.

POSTDOCTORAL POSITION IN MOLECU-LAR AND CELLULAR BIOLOGY. A postdoctoral position is available to study the role of serine/threoninespecific protein phosphatases in growth control and neoplastic transformation by DNA tumor viruses. Applicants should have experience in cell and molecular biology. Please send curriculum vitae, a brief description of research experience, and the names and addresses of three references to:

> Dr. Gernot Walter Department of Pathology, 0612 University of California, San Diego 9500 Gilman Drive La Jolla, CA 92093-0612

POSTDOCTORAL POSITIONS. Available immediately for applicants with backgrounds in (i) mammalian cell heterologous expression and (ii) protein biochemistry. Investigating limits to protein expression and con-sistency of post-translational modifications. Cross-disci-plinary research group of biologists and engineers. Send résumé and three names of references to: Drs. J. M. Piret/D. G. Kilburn, Biotech Laboratory, University of British Columbia (UBC), Vancouver, BC, Canada V6T 1Z3. UBC encourages qualified women and minority applicants

POSTDOCTORAL POSITION. Available to examine the molecular genetics of programmed cell death. We will examine the regulation of previously cloned, hormonally regulated cell death genes. Experience in molecular biology essential, knowledge of *Drosophila* genetics desirable. Send curriculum vitae and the names and telephone numbers of three references to: **Dr. L. M.** Schwartz, Department of Zoology, Morrill Science Center, University of Massachusetts, Amherst, MA 01003. Salary commensurate with qualifications. Applications accepted until position filled. Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

CLEVELAND CLINICAL FOUNDATION DEPARTMENT OF HEART AND HYPERTENSION RESEARCH POSTDOCTORAL POSITION

Available immediately to participate in the ongoing studies of receptor structure and function, and signal transduction using molecular and structural biology techniques including gene synthesis, site-directed mutagene-sis, protein purification and reconstitution, and macro-molecular modeling. Applicants must hold a doctoral degree and have prior strong training in molecular biology. Experience in protein biochemistry is also de-sirable. Send curriculum vitae to: Dr. Robert M. Graham, Chairman, Department of Heart and Hyperten-sion Research, Cleveland Clinic Foundation/FF3-20, 9500 Euclid Avenue, Cleveland, OH 44195–5071.

POSTDOCTORAL/RESEARCH ASSOCIATE. To conduct research in organic and inorganic synthesis and characterization of molecules as potential contrast agents in nuclear magnetic imaging. Job requires a Ph.D. in organic synthesis and familiarity with synthetic techniques: HPLC, NMR, FTIR, and MS. Send résumé to: Dr. Hank Kung, University of Pennsylvania, Depart-ment of Radiology, 3700 Market Street, Room 305, Philadelphia, PA 19104.

POSTDOCTORAL FELLOW. With background in cell and/or molecular biology and an interest in brain development. Project involves the study of proteolipid protein and its expressions in cultured cells and in vivo. he studies will be carried out in the Biochemistry and Molecular Biology Division of the Eunice Kennedy Shriver Center located in suburban Boston and affiliated with Harvard and other institutions. Projects within the center include different aspects of developmental neuroscience, neurochemistry, and genetic disorders in brain development. Interactions among the various groups are encouraged, providing a stimulating environment for broad neuroscience training. Submit curriculum vitae and reference letters to: Dr. Marjorie Lees, c/o Person-nel Department, Biochemistry Division, Eunice Ken-nedy Shriver Center, 200 Trapelo Road, Waltham, MA 02254

POSTDOCTORAL FELLOW/CELL REGULA-TION. Applications are invited for postdoctoral fellows interested in the cell and molecular biology of endocyto-sis. The successful candidate will join an exciting group of investigators dedicated to understanding at the molecular level how receptor bound molecules enter cells by coated pit and noncoated pit pathways. Qualified candi-dates should possess either the Ph.D. or M.D. degrees and be experienced with molecular biology and cell biology techniques. Please send curriculum vitae and three letters of recommendation to: **Dr. Richard G. W.** Anderson, Department of Cell Biology and Neuroscience, University of Texas Southwestern Medical Center, Dallas, TX 75235. Equal Opportunity Employer.

RESEARCH FELLOWSHIPS IN INVESTIGATIVE AND MOLECULAR DERMATOLOGY

The Skin Diseases Research Center at Case Western Reserve University (CWRU) offers a postdoctoral pro-gram for those with an M.D. or Ph.D. degree contemplating an academic career in dermatological research. Special expertise and research areas of our program faculty include: immunodermatology, molecular and cellular biology, photodermatology, notectial and cel-lular biology, photodermatology and photomedicine, and skin pharmacology and skin carcinogenesis. This program is funded by an NIH training grant. Candidates must meet citizenship requirements for a National Service Research Fellowship. For more information, send curric-phere time and writing of career phase to Denid P ulum vitae and outline of career plans to: David R. Bickers, M.D., Director, Skin Diseases Research Center, Case Western Reserve University, 2074 Abington Road, Cleveland, OH 44106. Telephone: 216-844-3111. CWRU is an Affirmative Action/Equal Opportunity Employer.

FREE PRODUCT INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and *Science* will put you in touch with the vendors whose products you will need. Write to: SCIENCE New Lab Service Department 1515 Broadway New York, NY 10036

SCIENCE, VOL. 253



RESEARCH OPPORTUNITIES

The Eastern Regional Research Center (ERRC), Agricultural Research Service, USDA, has openings for Postdoctoral Research Associate and a permanent, full time Microbiologist. ERRC is located on an attractive 27 acre campus just outside of Philadelphia in Wyndmoor, Montgomery County. It has ample free parking, cafeteria, is close to public transportation, and employees enjoy a flexible work schedule. It has an active research program in many agriculturally, industrially, and nutritionally important areas conducted by over 250 scientists, engineers and support staff. ERRC has available for staff use state-of-the-art instrumentation, its own library, and a computer center.

MICROBIOLOGIST

To develop a research program investigating the thermal resistance of *Clostridium botulinum*. A degree in microbiology or a related field with 20 semester hours in microbiology and knowledge of food microbiology is required. Knowledge of spore physiology and food technology is desirable. Must be U.S. Citizen. For information on the research project contact Dr. Arthur Miller at (215) 233-6676. Application must be marked 1NO55 and received by July 26, 1991.

RESEARCH ASSOCIATE

To investigate the use of lipases as applied catalysts and explore the effects of chemical modification upon their catalytic properties. Appointment is for 2 years. Must have relevant Ph.D. within the last 3 years. Knowledge and experience in biochemistry or related organic chemistry is required. Experience in protein modification is desirable. For information on the research project Dr. Michael Haas at (215) 233-6459. Application must be marked 1NO56.

Salary commensurate with experience \$31,116 to \$37,294. For information on application procedures and forms contact Angela Canterini at (301) 344-1863. Send resume/application including 3 references to appropriate contact listed above to: USDA, ARS, ERRC, 600 East Mermaid Lane, Wyndmoor, Pennsylvania 19118. Applications in response to this advertisement should be marked with the appropriate number.

USDA/ARS IS AN EQUAL OPPORTUNITY EMPLOYER

Pharmacologists

Marion Merrell Dow is a name that's recognized for successful research efforts which enhance the quality of life worldwide. Today, we have challenging opportunities for both experienced Pharmacologists and Senior Pharmacologists to join our quality career environment in Kansas City.

These positions will be responsible for the pharmacological and metabolic evaluation of products, including preclinical studies to adequately describe the mechanism of action, safety, and pharmacology of the products. You will also provide assistance to higher level scientists in developing, performing, evaluating, and reporting preclinical pharmacology experiments.

We require an MS or PhD degree in Biochemistry with at least 3 years experience in Enzymology (enzyme assays, kinetics, protein purifications etc.); tissue culture; receptor binding assays; and immunoassays. Experience with standard laboratory equipment, in vitro preparations and in vivo techniques, including animal handling and surgery essential.

Let our many advantages enhance your workstyle. Our location in Kansas City is ideal for both families and singles. In addition to a reasonable cost of living, you will also find a wide range of cultural and recreational activities. For consideration, please submit resume with salary history to: Marion Merrell Dow Inc., Staffing Dept. CNA, P.O. Box 9627, Kansas City, MO 64134. An Equal Opportunity Employer.



SANOFI DIAGNOSTICS PASTEUR, INC.

QUALITY, LEADERSHIP, AND INNOVATION

Sanofi Diagnostics Pasteur, Inc., formerly Kallestad Diagnostics, is an international leader in the design and development of medical diagnostic test kits and instrumentation for human diseases and allergy. Our continued growth and success has created a number of opportunities for highly motivated, talented professionals with research expertise in the following areas:

TUMOR MARKERS -

GROUP LEADER ASSAY DEVELOPMENT

This position will lead a group of scientists in developing immunoassays for tumor markers. We seek an individual with a Ph. D. in immunology or molecular/cellular biology and 3-7 years of experience in *in vitro* cancer diagnostics. You will be responsible for establishing an R&D program in the tumor marker area. Knowledge of FDA and PMA regulations is required.

ENDOCRINOLOGY - GROUP LEADER ASSAY DEVELOPMENT

The successful candidate will be a Ph.D. in Immunology or Biochemistry with 3-7 years of experience in immunoassay development. Candidates with clinical laboratory experience are preferred.

AUTOIMMUNE - PRINCIPAL R&D ASSOCIATE

The successful candidate will have a Ph.D. in cellular or molecular biology, biochemistry, or immunology and 3-5 years experience and will coordinate the activities of a group in the development of immunodiagnostic assays for systemic and organ-specific autoimmune diseases. Preference will be given to individuals with experience in plasmid construction, recombinant expression systems and synthetic peptide epitopes.

ALLERGY - PRINCIPAL R&D ASSOCIATE

This position will join our efforts to characterize the immunodominant epitopes of allergens recognized by the atopic patient. A Ph.D. and 1-3 years experience are required. Experience with recombinant DNA technology and antigen presentation is required.

INFECTIOUS DISEASE - PRINCIPAL R&D ASSOCIATE

Join our expanding group focused on developing immunodiagnostic, instrument-based test kits for human infectious agents. We seek a Ph.D. trained in microbiology, immunology, or related field and 0-2+ years of industrial experience in virologic or bacteriologic immunoassay design/development. Experience with molecular techniques and hybridoma screening is essential.

PROTEIN CHEMISTRY - SENIOR R&D ASSOCIATE

We seek an individual with experience in peptide synthesis and immunochemistry. Join our team in designing and developing peptide fragments which mimic the immunodominant epitopes of target autoantigens and allergens. A Ph.D. in Biochemistry or Immunology and 2-5 years experience or an M.S. in biochemistry and 5-9 years of experience are required.

RESEARCH & DEVELOPMENT ASSOCIATES

We are looking for individuals with a B.S. or M.S. in biology, microbiology, immunology, or biochemistry to assist senior scientists in various phases of research in the general field of antigen presentation and T-/B-cell epitopes. Experience in molecular biology, hybridomas, biochemistry, and immunology is required.

Sanofi Diagnostics Pasteur offers an excellent salary and benefits package including company paid family medical insurance, a 401k plan, attractive relocation package, and the opportunity for continued growth with a dynamic organization. For confidential consideration, please send your resume to: Sanofi Diagnostics Pasteur, Inc., 1000 Lake Hazeltine Drive, Chaska, MN 55318, Attn: Mary Moen/Human Resources.



Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW

Postdoctoral position available immediately to study the molecular basis of cervical and breast cancer and chronic fatigue syndrome. Emphasis is placed on the use of molecular probes to diagnose and understand the viral etiology of these diseases. Experience in molecular biology techniques (e.g., oligonucleotide synthesis, PCR, Southern blotting, and in situ hybridization) desirable. Send curriculum vitae and names of three references to: Dr. Brian Herman, Department of Cell Biology and Anatomy, University of North Carolina at Chapel Hill, CB# 7090, 232 Taylor Hall, Chapel Hill, NC 27599. Equal Employment Opportunity Employer.

LA TROBE UNIVERSITY-AUSTRALIA LA TROBE UNIVERSITY RESEARCH FELLOWSHIPS

The university is offering postdoctoral research fellowships in any discipline of the university. The proposed research project must be in collaboration with a current university researcher and must complement the existing research work.

Applicants should have gained doctoral or equivalent qualifications within the last 5 years. A person who currently holds a permanent appointment is not eligible to apply.

Fellowships, which will be awarded for a period of 24 months, are intended to advance the research activities of the university by bringing to or retaining in Australia promising scholars.

Applications must be forwarded to the assistant manager (Personnel Services) on the university's form, which will be sent on request, together with further information about the fellowship.

Salary offered is within the range of \$A28,792 to \$A32,762. The closing date for applications is 30 September 1991.

Enquirers should briefly indicate the research discipline of interest to them. Further information can be obtained from: Assistant Manager (Personnel Services), La Trobe University, Bundoora, Victoria 3083, Australia.

Equal Opportunity is university policy.

POSTDOCTORAL RESEARCH POSITION. Available to study the biochemistry and structure of eukaryotic transcription factors and DNA-binding motifs by mutagenesis and 3D/4D-NMR structure analysis. Please send your credentials and the names of the scientists who best know your work to: Michael A. Weiss, M.D., Ph.D., Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, 240 Longwood Avenue, Boston, MA 02115. Harvard Medical School is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE RESEARCH MOLECULAR BIOLOGIST

Program in transplant immunology is offering a position for a molecular biologist/molecular immunologist. Position involves studies of HLA gene regulation, DNA binding proteins, and HLA allele definition utilizing molecular approaches to gain a better understanding of antigen presentation and tolerance induction. Candidates should have Ph.D. degree with at least 2 years of postdoctoral training. Salary range: \$41,600 to \$64,000 depending on experience and qualifications. Send curriculum vitae and references to: **Marvin R.**

Send curriculum vitae and references to: Marvin R. Garovoy, M.D., University of California, San Francisco (UCSF), 520 Health Sciences East, Third and Parnassus Avenue, San Francisco, CA 94143–0508.

UCSF is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGIST-RESEARCH AS-SOCIATE. Suburban Philadelphia biomedical company is seeking a master's or Ph.D. level molecular biologist to work independently on product development. Responsibilities include design and application of sequence-specific oligonucleotide probes for detection of human alleles. Research will provide products useful for genetic disease diagnosis and clinical research. Successful candidate will possess knowledge of DNA amplification, extraction, and hybridization. ELISA and related assays plus computer programming is desirable. Please send curriculum vitae including salary requirement (a must) to: Box 7, SCIENCE Classified Advertising, 1333 H Street, N.W., Room 940, Washington, DC 20005. Affirmative Action/Equal Opportunity Employer, M/F. Title: **RESEARCH ASSISTANT I.** Duties: Independently conduct laboratory investigation on cardiovascular failure of neonates, making day to day judgments as to the success of the approach. Provide supervision and assistance to laboratory technician, assistant, or aide. Search scientific journals for information on techniques and developments applicable to particular area of research. Teach or assist in teaching graduate students or others rotating through the laboratory. Teaching will consist of laboratory routines and techniques specific to the investigator's laboratory to graduate students and others working on a temporary basis. Requirements: B.S. chemistry, biology, physics, biochemistry, or microbiology. Education must include significant portion of coursework in animal sciences such as physiology and anatomy. Salary: \$20,295 per calendar year. Hours: 8:00 a.m. to 5:00 p.m., 40 hours per week. Contact: Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222. RE: AL0626346.

RESEARCH ASSISTANT. Southwestern Ohio University. Perform experiments, research in tissue and cell cultures, tissue dissection, sub-cellular fractionation, purification and analysis of protein, nucleic acid, carbohydrates, enzyme assays, DNA cloning, DNA sequencing, polyclonal and monoclonal antibody production, histology, immunocytochemistry. Maintain laboratory, including supplies, stocks of cell cultures, tissues, DNA plasmids, antibodies, purified proteins. Bachelor's degree in medical science or a biological science plus 1 year of experience. Experience or education must include either 1 year of experience or one academic course in each of: anatomy, biochemistry, histology, microbiology, pharmacology, and physiology. Forty hours; overtime as needed; 8:30 to 4:30; \$16,548.40 yearly. Must have proof of legal authority to work permanently in the United States. Send résumé in duplicate (no calls) to: J. Davies, JO#1099793, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

SENIOR RESEARCH BIOCHEMIST. Research for development of anticoagulants applying knowledge of mechanistic bioorganic chemistry, enzymology, molecular biology, and protein chemistry. Determination of thermodynamic and kinetic parameters of action of enzymes and site-directed mutants. Cloning, expression mutation, and purification of proteins in thrombosis and mechanisms-based enzymes inhibitors to determine enzyme mechanism. Requirements: Ph.D. in bioorganic chemistry; 2 years of experimental postdoctoral research in mechanistic enzymology including chemical enzymology, synthesis of isotopically labeled chemicals, characterization of bacteria metabolism and isolation of natural products. Must have outstanding academic record and scientific publications. Forty hours per week; salary: \$4000 per month; send résumé or curriculum vitae to: Philadelphia Job Bank, 444 North 3rd Street, Philadelphia, PA 19123, JO #4382540, with proof of authority to be employed in the United States.

FOREST ECOLOGY

The U.S. Department of Agriculture (USDA) Forest Service in Delaware, Ohio, has a **RESEARCH ECOL-OGIST** position opening up in its Forest Ecosystem Modeling Project. Salary negotiable between \$44,348 to \$57,360. Assignment is to conduct collaborative research on a modeling framework incorporating physiological, plant, stand, forest, and landscape processes and to model the response of oak-hickory plant communities to forest management practices and to changes in climatic and atmospheric conditions. To receive full vacancy announcement, send your résumé by 5 August 1991 to: Dianna Johnson, USDA Forest Service, 5 Radnor Corporation Center, Suite 200, 100 Matsonford Road, P.O. Box 6775, Radnor, PA 19087–4585. Telephone: 215-975-4243.

CHEMIST. Duties are to work on problems involving vibrational spectroscopy and spectral hole burning, and to conduct experiments which include ionic solids and polymers. Qualifications required include a Ph.D. degree in physical chemistry with knowledge of vibrational spectroscopy, lasers, cryogenics, and polymers. Salary range of \$30,540 to \$34,968. Jobsite interview: Berkeley, California. Send this ad and a résumé to: Job #LG1088, P.O. Box 9560, Sacramento, CA 95823– 0560 no later than 3 August 1991. This is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ROOT PHYSIOLOGIST/ECOTOXICOLOGIST BOYCE THOMPSON INSTITUTE

The Boyce Thompson Institute (BTI) for Plant Research at Cornell University invites applications for a tenure-track **ASSISTANT SCIENTIST** position in the Environmental Biology Program. Candidates qualified to investigate the physiology and ecology of root systems as they are affected by environmental pollution and natural stresses, who have experience with quantitative aspects of biology and who can work with simulation and mathematical modelers are encouraged to apply. The successful candidate will be expected to conduct independent research and participate as a member of multidisciplinary research teams within the institute and Cornell University. Qualifications include a Ph.D. in plant sciences, or in ecotoxicology, biochemistry, or biophysics with emphasis on plant systems. Submit curriculum vitae, statement of research goals, and three letters of reference by 31 August 1991 to: Dr. Thomas LaRue, Chair, Search Committee, Boyce Thompson Institute, Tower Road, Ithaca, New York 14853–1801. BTI is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT SCIENTIST (ASTRONOMER/COMPUTER SCIENTIST)

A major scientific research organization is seeking two radio astronomers to develop specialized computer programs for processing and analyzing radio astronomical data. Primary responsibilities will involve writing Astronomical Image Processing System (AIPS) software for reducing and analyzing data from Very Long Baseline Interferometry (VLBI) spectral line observations. Applicants should be knowledgeable in interferometric observing and data reduction techniques as demonstrated by published research. Prior programming experience in FORTRAN is essential and should include significant experience involving the support of at least one major program package in astronomical computing. Positions will allow for individually guided research up to onequarter time.

¹ Each position requires a Ph.D. in radio astronomy or astrophysics plus a minimum of 4 years of experience in astronomical computing. Applicants possessing a combination of education and experience which approximates a Ph.D. degree are also invited to apply.

The positions are full-time, 40 hours per week and carry a starting salary of \$36,575 per year in addition to a full complement of fringe benefits. Working hours are 8:00 to 5:00 Monday through Friday.
Please forward résumé to:

lease for ward resume to:

New Mexico Department of Labor CC1501 109 Faulkner Street Socorro, NM 87801 Job Order No. 334020

MARINE SCIENTIST SENIOR (#113)

Grade 12. Entry salary: \$27,538. Starting salary may be higher depending upon experience or exceptional qualifications and previous salary level of appointec. This is a restricted appointment with funding which is subject to renewal 30 June 1992. Some evening and weekend work will be required.

work will be required. The successful applicant will develop, coordinate, and implement research and monitoring projects at CB-NERRS-VA sites. Trains volunteers, serves as staff scientist to research advisory committee, and performs other related duties.

Qualifications—Ability to perform strenuous work outdoors in a variety of weather conditions required. Bachelor's degree in biology or a related field required. Demonstrated familiarity with the design and conduct of field research projects, statistical analysis, and advanced microprocessor analytical procedures required. Working knowledge of the Chesapeake Bay ecosystem, National Bestuarine Research Reserve System, and National Ma-Estuarine Research Reserve System, and National Mation and interpersonal skills required. Master's degree in marine science or a related field or an equivalent combination of experience and training preferred. Location— Virginia Institute of Marine Science (Dean/Director's office).

A Commonwealth of Virginia application must be received not later than 2 August 1991 in the Office of Personnel Services, College of William and Mary, Thiemes House, Williamsburg, VA 23185. The College of William and Mary is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE RESEARCH SCIENTIST

Children's Hospital Oakland (CHORI) seeks an experienced scientist at the associate level or above to direct an independent research program related to pediatrics. CHORI is a basic research institute with expertise in cellular biology, molecular biology, and mass spectrometry. Preference will be given to a scientist with transferable NIH funds. Immediate financial support provided by the institute. Potential for long-range financial institutional support exists. Newly renovated laboratory space available with access to extensive shared laboratory facilities. To apply, send résumé to: **Yvette Williams**, **Job # 10237**, 747 52nd Street, Oakland, CA 94609. *Equal Opportunity Employer*.

Applications are invited for a highly motivated SCI-ENTIST at the Florida Hospital Cancer and Leukemia Research Center. Applicants must have a Ph.D. in bioology. Postdoctoral experience is preferred. Available immediately to clone and express recombinant plant toxin molecules. Studies from this laboratory include *Mol. Cell. Biol.* 9, 415–520 (1989); *Mol. Cell. Biol.* 9, 5012–5021 (1989); *Mol. Cell. Biol.* 10, 6257–6263 (1990). Interested candidates are invited to send their curriculum vitae, bibliography, and three letters of recommendation to:

> Dr. Arthur Frankel, Director Florida Hospital Cancer and Leukemia Research Center 616 East Altamonte Drive, #100 Altamonte Springs, FL 32701 (Greater Orlando Area) Telephone: 407-339-1004

The Department of Commerce (DOC)/NOAA/OAR/ NOAA Undersea Research Program (NURP) is seeking applicants for the position of MARINE PHYSICAL SCIENTIST, GM-1301-14 (\$52,406 to \$68,129). Duties: The incumbent manages and directs NURP research grants activities in the marine physical science disciplines and is responsible for the formulation, coordination, evaluation, improvement, and monitoring of various research programs. The position is located in Silver Spring, Maryland. Applicants must submit the June 1988 edition of the Standard Form 171 by 9 August 1991 to: NOAA/Personnel Operations Division/ NOS-OAR Operations Branch, SSMC-1, OA213, #3230, 1335 East West Highway, Silver Spring, MD 20910. The position is open to status candidates; however, nonstatus applicants must apply through the OPM Physical Science register or participate in the OPM Tech Fair to be held on 26 to 27 July 1991 at the Washington Convention Center. For additional information call 301-427-2506. Refer to Vacancy #: OA/M-91-25-MMP. DOC is an Equal Opportunity Employer.

RESEARCH FISHERY BIOLOGIST (TWO PO-SITIONS). GS-11 (\$31,116 to \$40,449) or GS-12 (\$37,294 to \$48,481). The United States Fish and Wildlife Service, National Fisheries Research Center-Great Lakes, Ashland, Wisconsin, and Sandusky, Ohio, is seeking an experienced individual with bachelor's or higher level degree in the area of fish population dynamics research. Applicants must have demonstrated experience in the experimental design, assessment, analysis, and interpretation of fish population dynamics tudies; ability to plan, develop, and organize research of fish population dynamics in large lake ecosystems; skill in the computation and interpretation of biological statistics of fish populations; ability to communicate results of independent research both orally and in writing; and ability to work effectively in a close team environment. The incumbent applies modern principles and procedures of fishery biology in researching the interacting fish stocks of Lake Superior, leading to the development of practical interagency strategies for managing the various fisheries these stocks support. Duties include: design and execution of sampling programs, supervision of field collections and sample processing, data analysis and interpretation, publication of results, and other duties as assigned. The United States Fish and Wildlife Service is an Equal Opportunity Employer. Applications are encouraged from women and minorities. Applications are encouraged from women and minorities. Applications are encouraged from should be sent to: United States Fish and Wildlife Service, National Fisheries Research Center-Great Lakes/S, 1451 Green Road, Ann Arbor, MI

19 JULY 1991



Syntex, a leading pharmaceutical company has a commitment to basic and applied research. Toward this end, we devote 30% of our staff and 19% of our profits to R&D. Consider the following:

Neuropharmacologist

Palo Alto, California

This position involves working within a multidisciplinary team of neuroscientists and neruopharmacologists dedicated to the discovery of novel therapeutic agents for the treatment of neurological diseases. PhD in a neuroscience-related field with 1-3 years postdoctoral experience in neuropharmacology, neurochemistry and/or molecular biology. Primary responsibilities include operating a laboratory devoted to the differential localization and quantitation of receptors and distribution of mRNA using image analyzed in-vitro autoradiography and in-situ hybridization techniques, respectively. You will be encouraged to contribute to the active publication program of the research group and to participate at scientific meetings. To be innovative, have superior communication skills and the ability to implement ideas and interact effectively with colleagues in various departments is an essential requirement.

Syntex offers competitive salaries and a comprehensive benefits and relocation package including an incentive bonus. Send your resume to: Syntex, Dept. KM/SC, 3401 Hillview Ave., Palo Alto, CA 94303. Equal opportunity employer.



Research AILES Center

BS/MS RESEARCH SCIENTISTS

At Miles Research Center, we have two outstanding opportunities for qualified BS/MS level Scientists to play significant roles within two groups of our Institute for Arthritis and Autoimmunity. As part of these groups, you will be working with scientists in multiple disciplines.

Histology Core Facility—In this role, you will be required to run a high volume multidisciplinary histology lab. This will involve processing and sectioning of paraffin, frozen and plastic embedded hard and soft tissues for light microscopy. To qualify, you'll need an M.S. with 5+ years' histology experience or a B.S. with 7+ years' histology experience.

Cell Sorter/Image Analysis Facility— You will be trained in the operation and maintenance of three flow cytometers and a microscope-based image analysis system. To qualify, you'll need a B.S. in biology, biochemistry, computer science or engineering, in addition to 2 years' laboratory experience in biology with instrument operation experience (i.e., flow cytometer, image analysis system).

Both positions require strong communication and interpersonal skills.

Each of these positions offers an attractive compensation and benefits package. **To apply, please indicate position of interest and send resumes including salary history to: Dept. CEC, Miles Inc., Pharmaceutical Division, 400 Morgan Lane, West Haven, CT 06516.** An Equal Opportunity Employer M/F/H/V.

National Institutes of Health Public Health Service FELLOWSHIP IN ELECTROPHYSIOLOGY

The Laboratory of Neurosciences at the National Institute on Aging, Bethesda, Maryland invites applicants for a Fellowship position to study voltage and neurotransmitter-gated ionic currents in aneuploid dorsal root ganglion and hippocampal neurons, and to study synaptic transmission and synaptic integrity in the aneuploid nervous system. The program will primarily involve whole cell and single channel patch clamp recordings of normal and trisomy 16 cultured fetal mouse neurons, which provide a model of human trisomy 21 (Down syndrome). Experience in patch clamp recordings is required.

Interested candidates should submit their Curriculum Vitae and two letters of recommendation to: Stanley I. Rapoport, M.D., Chief, Laboratory of Neurosciences, National Institute on Aging, National Institutes of Health, Building 10, Room 6C103, Bethesda, MD 20892.

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Gensia Pharmaceuticals, Inc. is seeking exceptionally talented Ph.D. level scientists with 1-5 years of post doctoral experience to join our multi-disciplinary group involved in the rational design of drugs targeted at enzymes important in metabolism. Our research programs are focused in the areas of cardiovascular, central nervous system and diabetes. Individuals with a successful record of independent research and good communication skills are encouraged to apply for the following positions:

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Responsibilities will include the identification, isolation and characterization of enzymes important to our drug discovery programs. Experience in enzyme kinetics is essential. Knowledge of protein structure, pharmacology and/or molecular biology is desirable.

Medicinal Chemist

Research efforts will involve the design and synthesis of drugs. Extensive experience in synthetic organic chemistry is essential. Experience in medicinal chemistry and computational chemistry is desirable.

Computational Chemist

Responsibilities will include the establishment of computer-assisted drug design strategies in collaboration with medicinal chemists and protein crystallographers. Emphasis is on the design and modeling of small molecule inhibitors in enzyme active-site models. Applicants should have extensive experience with UNIX workstations, standard programming languages, and all aspects of molecular modeling, including conformational searching, quantum mechanics and enzyme-inhibitor modeling. Knowledge of medicinal chemistry and protein crystallography is desirable.

Gensia is a rapidly growing biopharmaceutical company that offers an exciting research environment with competitive salaries and generous benefits. Please send CV to: Human Resources Dept., Gensia Pharmaceuticals, Inc., 11025 Roselle St., San Diego, CA 92121-1204, Attn: Mark Erion, Ph.D.



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Please mail or FAX your resume to John Cole, V.P. Development, TRANCEL CORPORATION, 1201 E. Wakeham Avenue, Santa Ana, CA 92705, FAX: 714-541-5423.

SOUTHEASTERN UNIVERSITIES RESEARCH ASSOCIATION PRESIDENT

The Southeastern Universities Research Association (SURA) invites nominations and applications for the position of President of the Association. The President is the chief executive officer of SURA and reports directly to its Board of Trustees.

SURA is a consortium of 40 universities in the southeast dedicated to planning and managing research facilities and projects appropriate for multi-university collaboration. Currently, SURA is involved in two major enterprises-the Continuous Electron Beam Accelerator Facility (CEBAF) in Newport News, Virginia, and SURAnet, an NSF supported computer network. It is pursuing projects in materials sciences and global change.

Duties of the President include general oversight of SURA's activities, interactions with member institutions regarding multiuniversity opportunities of potential interest to SURA institutions, negotiations with funding agencies, establishing effective relationships with organizations involved in support of scientific activities, and seeking opportunities for projects appropriate for SURA sponorship. The President represents the interests of SURA to several constituencies in Washington and elsewhere.

The offices of SURA are in Washington, D.C. Salary and starting date are negotiable. Board preference is to fill the position as soon as feasible.

Qualifications: The candidate should be a scientist or engineer with a distinguished record and have demonstrated abilities in leadership and management. The candidate should have an awareness and concern for national needs in scientific research, and should have significant experience with agencies and national organizations involved in supporting scientific research. Preference will be given to candidates with university administrative experience and/or experience in management of major scientific research projects.

Minority and women candidates are encouraged to apply.

Review of applications will begin September 1, 1991, and continue until a suitable candidate is identified. Send applications or nominations with complete biographical data, a statement of interest, and the names and addresses of three references to: Dr. Wimberly C. Royster, Chairman of the Board, c/o University of Kentucky, 514H Robotics Building, Lexington, Kentucky, 40506–0108. EEO/AA Employer/Section 504.

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The ideal candidate will be entrepreneurial, dynamic and possess proven managerial skills. Requires a Ph.D. with a strong background in molecular biology, knowledge of enzymology and a minimum of 8+ years post graduate experience including experience in a private company.

Further information can be obtained from Dr. Soren Carlsen (see below).

Applications, including full CV. and the names and addresses of relevant references should be sent to:

Dr. Soren Carlsen Vice President, Industrial Biotechnology c/o Entotech, Inc. 1497 Drew Avenue, Davis, CA 95616

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Under the direct supervision of our Research Scientist, you will perform standard/non-standard laboratory procedures. We prefer someone with 3-5 years experience involving biochemical procedures (HPLC, protein purification and spectroscopic assays), as well as immunochemical/immunologic procedures (cell separation, FACS, lymphocytes, monocytes, granulocyte function tests). A background in biochemistry and an MS/ PhD are also preferred.

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Mayo Clinic is seeking SCIENTIST TO HEAD THE SECTION OF HEALTH SERVICES EVAL-UATION. Applicants should have strong methodologic training with evidence of research productivity in terms of peer-reviewed publications and success in competing for research funding. An extramurally supported research program may focus on any aspect of health services evaluation, although opportunities in the Mayo environ ment may be greatest in technology assessment. The individual selected will be expected to develop and coordinate a cohesive working group of investigators, clinicians, and research fellows and to serve as a role model and catalyst to encourage interested clinicians to become actively involved in health services research. Ample resources are available to support efforts to develop a high caliber research unit and specific research programs. Opportunities derive from an extensive clini-cal database at Mayo and include the capability for population-based research among residents of Olmsted County, Minnesota, through the Rochester Epidemiology Project. Collaboration is available and encouraged with the closely integrated Sections of Biostatistics, Clinical Epidemiology, and Medical Information Re-sources. Academic rank will be commensurate with the candidate's qualifications and experience. There are no required patient care responsibilities, but practice oppor-tunities are available. Salary and benefits are most competitive. Qualified applicants should submit curriculum vitae to: Robert G. Tancredi, M.D., Mayo Clinic, Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

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Rosemary Hormuth (NIST-91-1129/RH) Room Á-123, Administration Building National Institute of Standards and Technology Gaithersburg, MD 20899

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managing routine analytical support efforts. A Ph.D. in chemistry, biochemistry, or equivalent experience is required. The ideal candidate will have at least 2 years of experience in oils analytical chemistry and laboratory management. Good communication skills are important. Pioneer is an Equal Opportunity Employer providing a

competitive salary, excellent benefits, plus a cooperative work environment. Applications received by 16 August 1991 will be assured of consideration. Please send résumé to:

Pioneer Hi-Bred International Inc. Department of Research Specialists Ms. Nancy Wiig 7250 N.W. 62nd Avenue, P.O. Box 1004 Johnston, IA 50131

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MEETINGS

DIOXIN '91 11TH INTERNATIONAL SYMPOSIUM ON CHLORINATED DIOXINS AND RELATED COMPOUNDS 23 to 27 SEPTEMBER 1991 **RESEARCH TRIANGLE PARK, N.C.**

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tact: Sharon Wills, School of Public Health, The University of North Carolina at Chapel Hill, CB# 8165, Miller Hall, Chapel Hill, NC 27599–8165. Telephone: 919-966-4032. FAX: 919-966-7141.

SECOND ANNUAL NORTHWESTERN UNIVERSITY/ SCHWEPPE COLLOQUIUM MOLECULAR ASPECTS OF DEVELOPMENT 29 SEPTEMBER TO 1 OCTOBER 1991 **EVANSTON, ILLINOIS**

Speakers include: Alan Bernstein, Noël Bouck, Moses Chao, Christopher Doe, Ursala Dräger, Douglas Engel, Brenda Gallie, John Gerhart, Iva Greenwald, Peter Gruss, Robert Holmgren, Philip Iannaccone, George Klein, Michael Kuehn, Arnold Levine, William McGin-nis, Scott Ness, Roger Pedersen, Stuart Orkin, Lawrence Pinto, Frank Ruddle, George Stamatovannopoulos, Gary Struhl, George Vande Woude, and Kai Zinn. For information and registration, contact: Sheri Don-

aldson, Education Programs Coordinator, North-western University Cancer Center, 8250 Olson Pavil-ion, 303 East Chicago Avenue, Chicago, IL 60611– 3008. Telephone: 312-908-5258. Organized by the Northwestern University Cancer

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COURSES AND TRAINING

BIOLOGICAL AND MOLECULAR APPLICA-TIONS OF MODERN SCANNING PROBE MI-CROSCOPIES, 18 and 19 September 1991. A hands-on workshop sponsored by the Center for Biopolymers at Interfaces, Department of Bioengineering, University of Lieb Thic workshop consists of lextures a poeter of Utah. This workshop consists of lectures, a poster session, and demonstrations of Atomic Force and Scanning Tunneling Microscopies. For information contact: Arline Allen, 2260 Merrill Engineering Building, Salt Lake City, UT 84112. Telephone: 801-581-3867.





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SCIENCE, VOL. 253



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