

Automated Amino Acid Analysis

AMINO SYSTEM 1 fully automates OPA (o-phthalaldehyde) and FMOC (fluorenylmethyloxycarbonyl) derivatizations, uses on-line membrane purification to clean the amplitude of the incoming analog signal



up biological or food samples, and immediately injects each sample into a reversed-phase high-performance liquid chromatography column coupled with fluorometric detection. After derivitization, the system removes all interfering macromolecules and undissolved substances that can adversely affect column performance. Because the fluorophores are prepared just before injection, results are not affected by the rapid fluorescence decay of certain derivatives. Gilson Medical Electronics. Circle 441.

Hybridization Incubator

The Model 310 replaces water baths, plastic bags, and heat sealers with screw-capped glass bottles rotating inside a controlled temperature chamber for nucleic acid hybridizations and for screening plaque and colony blots. A unique mechanical action wets the filters with minimal volumes of probe and wash buffers. Temperature is precisely controlled by a digital microprocessor and the rotator assembly can be removed easily from the chamber. The rotator holds ten 38 by 300 mm or twenty 30 by 150 mm glass tubes. A recorder signal is provided for continuous monitoring of temperatures. Robbins Scientific Corp. Circle 439.

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.

Spectropolarimeter System

The CD6 circular dichroism spectropolarimeter system automates the characterization of the optical activity of a compound. The performance of the system in the ultraviolet spectrum, as low as 180 nm, is useful in such genetic engineering applications as conformational studies of proteins, polypeptides, and polynucleotides. The CD6 optical design allows the use of cylindrical, rectangular, or microcells without the need for additional adapters. A wide range of accessories is available: wavelength range extender, linear dichroism attachment, thermostatted sample holder, high-performance liquid chromatography attachment, and stopped-flow assembly. SPEX Industries. Circle 574.

Genetic Thermal Cycler

The GTC-1 Genetic Thermal Cycler can increase DNA amplification yields while maintaining consistent, reproducible results. The microprocessor-controlled unit can be programmed to store up to ten temperature profiles, each of which can consist of up to 99 steps. Ramping rate is 1°C per second. The GTC-1 operates from 25° to 100°C with a tap water hookup, and from 0° to 100°C with an external cooler. The unit has 48 0.5-ml sample wells for microcentrifuge tubes. VWR Scientific. Circle 570.

Microforge

The MF-9 is a microforge for polishing and shaping the tips of glass micropipettes for patch clamping and for producing microtools. The MF-9 contains a heater control that enables the user to adjust heat precisely so various sizes and compositions of glass capillaries can be accommodated. A micromanipulator is provided to facilitate positioning of the micropipette near the heating element, which can also be manipulated. Narishige USA. Circle 445.

Population Dynamics Software

RAMAS/age is a new version of a popular software package that simulates age-structured population dynamics for ecological research. Using RAMAS/age, one can construct population models by specifying information on survival, fecundity, migration, density dependence, and the amount of variation associated with these processes. RAMAS/age projects population size through time and provides a risk assessment

calculated as the probability of the population falling below or rising above certain levels during the course of the simulation. The information can be used to answer questions regarding the design of nature preserves, different management regimes, and the capability of natural populations to recover from disturbance. The software package requires an IBM PC, XT, AT, or compatible; DOS 2+; 384 K random access memory; and CGA, EGA, VGA, or Hercules monographics. Applied Biomathematics. Circle 551.

Literature

Obsermet Wind Systems is a brochure describing a new generation of digital wind speed and direction measuring systems that enable users to build fully computerized systems communicating to any central point via common communications links. Science/Electronics, Inc. Circle 463.

The *Model U-2000 Enzyme Kinetics Data System* brochure describes the features of this automated spectrophotometer and kinetics software package. Hitachi Instruments. Circle 465.

NALGENE Product News introduces 28 new labware products. It includes tubes and spacers to fit many vertical ultracentrifuges. Special tube plugs, spacers, a removal tool, and acrylic racks augment the line of centrifuge ware. New filter caps and right-to-know safety products are also described. Nalge Co. Circle 466.

Western Blotting . . . from Electrophoresis through Detection is a catalog of products for protein immunoblotting. The 24-page booklet includes a detailed chart of detection strategy and provides a quick reference to techniques, applications, and products for separating proteins, monitoring electrophoresis and protein transfer, gel staining, and blotting. Amersham Corp. Circle 467.

PC Systems Handbook for Scientists and Engineers is a 68-page publication with many new products for personal computer (PC)-based data acquisition and instrumentation control. The handbook also serves as a technical information reference. The latest edition includes A/D converters, multiport serial boards, IEEE-488 interfaces, digital oscilloscope boards, and PC expansion chassis. CyberResearch. Circle 497.

Retention Times is a free periodical on chromatography. The latest issue describes the 9000 Series gas chromatography (GC) analyzers and the Model 850 benchtop GC-mass spectrometry system. The publication also includes a listing of current reprints and application notes that are available on request. Tracor Instruments. Circle 498.

Personnel Placement

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

LINE CLASSIFIED ADVERTISEMENTS

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

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

CLASSIFICATION: **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; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

SUBMISSION: Prepare double-spaced typewritten ad copy on a separate sheet. On cover sheet, state name and telephone number of contact person, desired date(s) of publication, and billing information, including any special invoicing requests. Mail or FAX to:

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

RATE: \$41 per line, \$410 minimum, per week. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. To ESTIMATE ad cost, structure ad copy on a 52-character line, include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines x \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

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

CREDIT CARDS: **SCIENCE** accepts MasterCard and VISA. Both personal and corporate cards may be used. The prepayment discount does not apply to credit card ads.

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

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

DISPLAY PERSONNEL ADVERTISEMENTS

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

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

RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications. **SCIENCE** encourages applicants for positions to investigate employment laws, non-discrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to

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

POSITIONS OPEN

ASSISTANT PROFESSOR ASSUMPTION COLLEGE

The Division of Natural Sciences of Assumption College invites applicants for a tenure-track position at the assistant professor level beginning in September 1991 (pending budgetary approval). Candidate must have a Ph.D. in biological science with emphasis in cellular/molecular biology and a strong commitment to undergraduate teaching. The teaching focus will be molecular genetics and cell biology and include biology for nonmajors. Applications, including curriculum vitae, undergraduate and graduate transcripts, and three letters of reference, should be sent to: Dr. Paul J. Mahon, Biology Search Committee, Assumption College, 500 Salisbury Street, Worcester, MA 01615, by 31 January 1991. Applications received after this date may receive consideration. There are no in-house applicants.

Assumption College is a Catholic liberal arts college committed to excellence in undergraduate education. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR CELL BIOLOGY UNIVERSITY OF CALIFORNIA-RIVERSIDE

Applications are invited for a tenure-track faculty position, starting 1 July 1991, in cell biology at the assistant professor level in the Department of Biology, University of California, Riverside. Areas of particular research interest include cell-cell interactions and signaling, protein sorting, cytoskeletal structure and function, or the extracellular matrix.

The successful applicant should hold a Ph.D. degree and have postdoctoral experience. The individual will be expected to establish a vigorous research program, to interact with the cell and molecular biology graduate program, and to participate in teaching at the graduate and undergraduate levels.

Applicants should submit curriculum vitae and a statement of research interests and arrange to have letters sent by three to five referees to: Chair, Cell and Molecular Biology Search Committee, Department of Biology, University of California, Riverside, CA 92521.

Applications should be received by 8 February 1991 to be assured consideration.

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

AUGUSTANA COLLEGE, SOUTH DAKOTA ASSISTANT PROFESSOR, BIOLOGY

Community-oriented plant ecologist, Ph.D. This is a tenure-eligible position as assistant professor of biology beginning September 1991. Must be able to work with both aquatic and terrestrial systems. Teach principles of ecology, aquatic ecology, and team-teach introductory biology. Expected to maintain active research program that involves undergraduate students. Commitment to the mission of Augustana as a church-related liberal arts college required. Priority given to applications received prior to 1 February 1991. Send letter of application, curriculum vitae, three current letters of reference, graduate transcripts (direct from registrar's office), and statement of goals to: Jeanne Kruse, Administrative Assistant, Augustana College, Sioux Falls, SD 57197. *Equal Opportunity/Affirmative Action Employer.*

BIOLOGY. Two positions, tenure-track, ASSISTANT PROFESSOR. Beginning fall 1991. Ph.D. and teaching experience required. Randolph-Macon Women's College (R-MWC), a very competitive liberal arts college with historic strengths in the sciences, emphasizes teaching excellence. Position (i): candidates with demonstrated expertise in physiology or endocrinology at the molecular level. Teaching to include a course for nonmajors, a core course in human anatomy and physiology, and upper level courses in areas of interest. Position (ii): candidates broadly trained in botany with strong background in field biology and plant physiology. Teaching to include a nonmajors course in conservation, a core course in botany, and upper level courses in areas of interest. Submit letter of application, including a statement of teaching and research interests, curriculum vitae, and names, addresses, and telephone numbers of three references to: Dr. Douglas H. Shedd, Department of Biology, Randolph-Macon Women's College, Lynchburg, VA 24503. Telephone: 804-522-9839. Applications accepted until position(s) filled. *Equal Opportunity Employer.*

POSITIONS OPEN

SEARCH EXTENDED: COLBY COLLEGE

Applications are invited for a 1-year, sabbatical leave replacement position (1991-92) as ASSISTANT PROFESSOR OF BIOLOGY. Candidates should have a Ph.D., experience with and a strong commitment to teaching undergraduates, broad training in the biological sciences, and special interests and training in genetics, animal behavior, and animal biology. Familiarity with liberal arts colleges and/or postdoctoral training are desirable. Responsibilities will include teaching an upper-level course in genetics and one in animal behavior, and a segment of our introductory biology course that deals with animal biology. Submit letter of application, statement of teaching and research interests, curriculum vitae, reprints of publications, undergraduate and graduate transcripts, and three letters from individuals familiar with the applicant's teaching and/or research to: Professor Arthur K. Champlin, Chair, Department of Biology, Colby College, Waterville, ME 04901. A second review of applications will begin 15 January 1991 and continue until the position is filled. *Colby College is an Affirmative Action/Equal Opportunity Employer and encourages applications from minorities and women.*

ENVIRONMENTAL HEALTH SCIENTIST. The Department of Biology at the University of Arkansas at Little Rock invites applications for a tenure-track position at the level of ASSISTANT PROFESSOR to teach and conduct research in its environmental health sciences program, beginning 15 August 1991. Qualifications include a doctorate in environmental health, environmental health sciences, or a closely related area. An M.P.H. degree and teaching/research experience are desirable. Teaching responsibilities will include an introductory course in environmental health sciences, involvement in other introductory departmental courses, and upper level undergraduate/graduate courses in hazardous waste, air pollution, industrial hygiene, environmental health toxicology, and water quality management as appropriate to the applicant's area of expertise. Development of a research program, commitment to teaching, and service activities are expected. Send a letter of application, curriculum vitae, unofficial transcripts, brief outline of research interests, selected scholarly writings, and three letters of recommendation to: Dr. Robert L. Watson, Department of Biology, University of Arkansas at Little Rock, 2801 South University Avenue, Little Rock, AR 72204. To be assured of consideration, applications should be received by 15 February 1991.

Applications will be subject to inspection under the Arkansas Freedom of Information Act. The University of Arkansas at Little Rock is an Affirmative Action/Equal Opportunity Employer and actively seeks the candidacy of minorities and women.

GENETICIST. St. Andrews College invites applications for a tenure-track position in the Biology Department at the ASSISTANT PROFESSOR level beginning in September 1991. The successful candidate will be expected to participate in a team taught introductory biology course, teach upper-level courses in genetics and at least one of the following: microbiology and/or cell biology, direct undergraduate research, and participate in the college's interdisciplinary core curriculum. Expertise in tissue culture and/or recombinant DNA techniques desirable. Applicant must possess a Ph.D. in the biological sciences and show evidence of the skills necessary for effective teaching. Send curriculum vitae, transcripts, and three letters of recommendation by 15 January 1991 to: Geneticist Search Committee, c/o Dr. Dennis McCracken, Chair, MNHS Division, St. Andrews College, Laurinburg, NC 28352-5598. *St. Andrews is an Affirmative Action/Equal Opportunity Employer.*

PHYSIOLOGY/ANATOMY: ASSISTANT PROFESSOR. Tenure-track position beginning in late August 1991. Ph.D. required. Responsibilities include human anatomy/physiology, vertebrate physiology, and contribution to the freshman biology course. Applicant must be strongly committed to undergraduate teaching. Capital University, a multipurpose Lutheran institution, has a unified, interdisciplinary core curriculum for all undergraduate students; all faculty are expected to teach in core courses. Applications must be postmarked by 10 January 1991 to be considered. Send résumé, transcripts, and names and telephone numbers of three references to: Dr. Jerry Thomas, Department of Biology, Capital University, Columbus, OH 43209. *Equal Opportunity Employer.*

POSITIONS OPEN

GENETICS, tenure-track faculty position at the level of **ASSISTANT PROFESSOR**, Department of Biology, University of Miami. We are looking for either a population geneticist or a molecular/evolutionary geneticist who will develop an active research and teaching program. Send curriculum vitae, a summary of research interests, and the names of three references to: **Dr. Peter Luyckx, Genetics Search Committee, Department of Biology, University of Miami, Coral Gables, FL 33124**, by 15 January 1991. *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

DEVELOPMENTAL BIOLOGIST. The Department of Biology, Loyola University of Chicago, invites applications for a tenure track position at the level of **ASSISTANT PROFESSOR**, beginning August 1991. Candidates studying any animal or plant system will be considered. Responsibilities include teaching at the undergraduate and graduate levels, development of an active research program, and the supervision of graduate student research. Ph.D. required; postdoctoral research and prior teaching experience desirable. Applicants should send complete curriculum vitae, a statement of research and teaching interests, and three letters of recommendation by 18 January 1991 to: **Dr. Warren R. Jones, Chairman, Search Committee, Department of Biology, Loyola University of Chicago, 6525 North Sheridan Road, Chicago, IL 60626**. *Loyola University is an Affirmative Action/Equal Opportunity Employer.*

The Department of Chemistry and Biochemistry at Concordia University, Montreal, has a tenure-track opening for a synthetic organic chemist at the **ASSISTANT PROFESSOR** level. The successful candidate will be required to establish a research program that will attract external funding and to teach effectively at both the undergraduate and graduate levels. Concordia University is predominantly an English university located in downtown Montreal. *All qualified individuals are encouraged to apply, but, in accordance with Canadian immigration requirements, this advertisement is directed primarily to citizens and permanent residents of Canada. Concordia University is committed to employment equity.* Applicants should send a résumé and outline of proposed research and should arrange for three letters of reference to be sent directly to:

Dr. P. H. Bird
Chairman

Department of Chemistry and Biochemistry
Concordia University
1455 de Maisonneuve Boulevard, West
Montreal, Quebec, Canada E3G 1M8

Applications completed before 28 February 1991 will be given preference.

DEPARTMENT OF ANESTHESIOLOGY UNIVERSITY OF MINNESOTA

The University of Minnesota, Departments of Anesthesiology and Physiology, are seeking a research scientist for a full-time faculty position. This position is at the rank of **ASSISTANT PROFESSOR**, tenure track. Responsibilities will include the establishment of a research laboratory capable of basic investigation related to anesthesiology, as well as supporting the investigation of basic human muscle disorders. Other responsibilities will include the organization of research activities within the department of anesthesiology, teaching of undergraduate and postgraduate students, and assisting in collaborative research efforts.

Candidates must have a Ph.D. degree and a minimum of 2 years of experience as an independent investigator in one of the basic sciences related to anesthesia (muscular physiology, neurophysiology, etc.). Clear evidence of collaborative research with clinical investigators will be required.

Compensation and benefits will be competitive and dependent on qualifications.

Last date for receipt of applications is 15 February 1991. Send letters of application with the names of three references and curriculum vitae to:

Chairman, Search Committee
Department of Anesthesiology
University of Minnesota
420 Delaware Street, S.E.
Minneapolis, MN 55455

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR CELL BIOLOGY UNIVERSITY OF VERMONT

Applications are invited for a tenure-track position in the Department of Zoology. Applicants are expected to (i) hold a Ph.D. degree, (ii) have research experience with techniques of modern molecular biology and a primary research focus on some fundamental aspect of cell biology, (iii) teach cell and molecular biology, and (iv) develop a competitive research program in molecular cell biology. Applicants should forward current curriculum vitae and brief description of their research and teaching plans and should solicit three letters of reference to be sent to: **Dr. Judith L. Van Houten, Associate Chair, Department of Zoology, University of Vermont, Burlington, VT 05405-0086**. Review of applications will begin on 15 January 1991.

We especially encourage women, disabled, and minority candidates to apply. The University of Vermont is an Affirmative Action/Equal Opportunity Employer.

MEDICINAL CHEMISTRY, ASSISTANT PROFESSOR. The Department of Pharmaceutical Chemistry, University of California, San Francisco, is seeking outstanding applicants for a tenure-track vacancy in the medicinal chemistry area. Candidates must have a strong background in organic chemistry, relevant postdoctoral experience, a strong commitment to research and teaching, and demonstrated excellence in their field. Applications from individuals with interests in areas of organic, synthetic, or bioorganic chemistry relevant to medicinal chemistry are particularly welcome. Candidates should arrange for three letters of reference and should send curriculum vitae and a brief summary of research accomplishments and future research goals before 1 March 1991 to: **Professor Paul R. Ortiz de Montellano, Department of Pharmaceutical Chemistry, School of Pharmacy, University of California, San Francisco, CA 94143-0446**. *The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

ENVIRONMENTAL TOXICOLOGY

ASSISTANT PROFESSOR. Applications are invited for a tenure-track, 11-month appointment to begin after 1 July 1991. Research program should emphasize mechanisms of toxic action. While applicants are invited from all areas of expertise, we particularly seek individuals interested in toxicants as probes of immune, nervous, reproductive, or developmental processes; the molecular biology of xenobiotic metabolism; or the use of transgenic animals for toxicological studies. Teaching duties in the Interdepartmental Environmental Toxicology Program will include graduate instruction and supervision. Academic appointment will be in the Department of Entomology. A Ph.D. or equivalent degree is required. Send curriculum vitae, statement of research interests, and names and telephone numbers of four references to: **M. E. Adams, Search Committee Chair, Environmental Toxicology Program, University of California, Riverside, CA 92521**. Applications accepted to 1 February 1991. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF ARIZONA CULTURE SCIENCE TECHNOLOGY PROGRAM

Faculty search for two tenure-track **ASSISTANT PROFESSORS**: one with a focus of scholarly interest in the anthropology of technology and technological change in its social and cultural context, one with a focus of interest in history of technology and technological change in its social and cultural context. Applicants should have a strong background in archaeology or cultural anthropology (or history of technology) and also a strong background in some field of science or engineering. If appropriate a joint appointment may be arranged. Teaching responsibilities will focus on the development and teaching of undergraduate general education courses on the cultural and social context of technology as part of the university's program on culture, science, and technology. Doctorate required, salary competitive. Send résumé, publications list, summary of research interests, and three references to: **Professor W. D. Kingery, Room 338E, Mines Building #12, University of Arizona, Tucson, AZ 85721**. Closing date for applications is 15 March 1991. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOCHEMISTRY AND/OR MEDICINAL CHEMISTRY. The primary responsibility is to teach required biochemistry and medicinal chemistry courses. The Ph.D. degree is required, ideally earned in biochemistry or medicinal chemistry. An individual who can span both disciplines will be favored. An undergraduate degree in pharmacy is preferred, but not required. Application and selection process starts immediately. Inquiries and applications should be sent to: **Thomas A. Gossel, Ph.D., Professor and Chairman, Department of Pharmacology and Biomedical Sciences, Ohio Northern University, College of Pharmacy, Ada, OH 45810**. *Equal Opportunity/Affirmative Action Employer.*

BIOLOGIST. Tenure-track opening at the **ASSISTANT PROFESSOR** level for a broadly trained experimental vertebrate zoologist beginning fall of 1991. Applicant should be able to teach introductory zoology and have expertise in one or more of the following areas: physiology, physiological ecology, functional morphology, or developmental biology. Sends letters of application, curriculum vitae, transcripts, and three letters of reference to: **Dr. Larry H. Jones, Chair, Biology Department, The University of the South, Seawee, TN 37375**. The College has a highly selective liberal arts program for undergraduates. Application review will begin 1 February 1991. *Equal Opportunity Employer. Women and minorities are encouraged to apply.*

NEUROPATHOLOGIST. Department of Pathology, University of Virginia Health Sciences Center. A tenure-track position for an AP-NP Board-eligible or -certified neuropathologist at the level of **ASSISTANT PROFESSOR** is available. Curriculum vitae, a statement of clinical and research interests, and the names of three references should be sent to: **S. R. VandenBerg, M.D., Ph.D., Director of Neuropathology, Department of Pathology, Box 214, University of Virginia Health Sciences Center, Charlottesville, VA 22908**. *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

PHYSIOLOGY/NEUROBIOLOGY. ASSISTANT PROFESSOR, tenure track, starting fall 1991. Candidates must have Ph.D. and be committed to teaching undergraduates and to developing a research program involving undergraduates. Areas of specialty may be comparative physiology, neurobiology, or endocrinology. Teaching will include laboratory/lecture courses in comparative animal physiology and introductory biology. The Department of Biology consists of 13 full-time faculty and 250 majors. Siena is a 4-year liberal arts college (2700 students) of the Franciscan tradition with a strong commitment towards diversifying its faculty. *Women and minorities are encouraged to apply.* Minimum salary for a new Ph.D. will be \$30,000. Send résumés and three letters of recommendation by 31 January 1991 to: **Dr. Andrea Worthington, Head, Department of Biology, Siena College, Loudonville (Albany), NY 12211**. *Equal Opportunity Employer.*

WATERSHED EXTENSION SPECIALIST. Department of Geography, Utah State University (USU) invites applications for a tenure-track position as an extension specialist and **ASSISTANT PROFESSOR** in watershed science. The successful candidate will also be a member of the interdepartmental Watershed Science Unit in the College of Natural Resources. We are interested in candidates with expertise in surface water quality and riparian area management and who have broad backgrounds in natural resources management. The successful applicant will be expected to provide technical assistance to county and state extension specialists, federal agency personnel, watershed user groups, and public land managers, and publish in suitable extension outlets. The position in suitable extension outlets. The position is a 12-month appointment with 75% extension and 25% teaching and research. Applicants must be willing to travel extensively. Ph.D. required with at least one degree in watershed management, or a closely allied field such as physical geography, range management, forest science, fisheries, or wildlife science. Send a letter of application, résumé, transcripts, and have three letters of recommendation sent to: **Dr. Michael P. O'Neill, Extension Watershed Specialist Chair, Department of Geography, Utah State University, Logan, UT 84322-5420**. The application deadline is 31 January 1991 or until a suitable candidate is found. *USU is an Affirmative Action/Equal Opportunity and Immigration Reform and Control Act Employer.*

POSITIONS OPEN

NEPHROLOGIST. Opening for an academic nephrologist at the **ASSISTANT PROFESSOR** level, with interest in teaching, and research, to join the Division of Nephrology and the Nephrology Research and Training Center at University of Alabama at Birmingham (UAB). The successful candidate will have demonstrated expertise in the study of human genetic disease, relevant to homeostasis of electrolytes and also be licensed/eligible to practice medicine in Alabama. Send curriculum vitae and the names of three references to: **David G. Warnock, M.D., Director, Division of Nephrology and the Nephrology Research and Training Center, University of Alabama at Birmingham, University Station, Birmingham, AL 35294.** UAB is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR IN BIOCHEMISTRY/MOLECULAR BIOLOGY. Candidates with interests and research experience in membrane receptor processes, protein synthesis, or neurochemistry are preferred. Applicants will be expected to conduct an active research program, obtain extramural funding, and participate in teaching medical and graduate students. Send résumé, outline of research projections, and names of three references to: **Dr. I. Danishefsky, Chair, Department of Biochemistry and Molecular Biology, New York Medical College, Valhalla, NY 10595.**

Equal Opportunity/Affirmative Action Employer.

EVOLUTIONARY GENETICIST, ASSISTANT/ASSOCIATE PROFESSOR. Tenure-track teaching position for a person who has expertise in the genetics of natural populations with the aim of clarifying their evolutionary history and applying this knowledge to such fields as conservation biology, systematics, or population biology. Qualifications: Ph.D.; competency in modern systematics including molecular techniques; ability to teach genetics, general biology, and either botany or zoology. Postmark deadline is 28 January 1991. Applications will be considered up to 1 March 1991 if an opening still exists. Send curriculum vitae, a statement of professional goals, transcripts, and three letters of recommendation to: **Dr. Joe Brumbaugh, Chair, Department of Biology, Sonoma State University, Rohnert Park, CA 94928.** Affirmative Action/Equal Opportunity Educational Institution.

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY

Applications are invited for a tenure-track position. The department is responsible for teaching biochemistry to dental and postgraduate students. Research areas of particular interest include, but are not limited to, protein chemistry, physical biochemistry, molecular biology, and glycoconjugates. Preference will be given to candidates with demonstrated ability to obtain outside funding.

Applicants should submit a letter of application, curriculum vitae, statement of research interests, and the names/addresses of three references to: **Dr. Daniel Malamud, Chair, Department of Biochemistry, University of Pennsylvania, School of Dental Medicine, 4001 Spruce Street, Philadelphia, PA 19104-6003.** The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Applications from minorities and women are particularly encouraged.

ASSOCIATE PROFESSOR (Research track). Applicants should have a Ph.D. and expertise in data management and applied statistics, social outcome assessment, and qualitative and quantitative analysis of brain images. Significant experience in head injury research and research administration. Strong background in organizing, writing, and management of multidisciplinary research grants and contracts is required.

The successful applicant is expected to assist in the continued development and implementation of our extensive program of research in traumatic brain injury. He or she will plan and implement research fiscal management, administer program budgets, and supervise support staff.

Send curriculum vitae and references to:

**John A. Jane, M.D., Ph.D.
David D. Weaver Professor and Chairman
Department of Neurological Surgery, Box 212
University of Virginia Health Sciences Center
Charlottesville, VA 22908**

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

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR. The Institute for Toxicology, School of Pharmacy, University of Southern California. Applicants who have an ongoing research program in free-radical biology or chemistry with active interests in molecular biology and/or neuropharmacology as well as a strong commitment to teaching are sought for a tenure track position available 1 July 1991. Complete curriculum vitae and the names of three references should be submitted by 15 February 1991 to: **Dr. Paul Hochstein, Institute for Toxicology, 1985 Zonal Avenue, Los Angeles, CA 90033.** The University of Southern California is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR

Applications are invited for a faculty position in the Division of Infectious Diseases of the Department of Medicine at Hahnemann University School of Medicine. Requirements include a Ph.D. in molecular biology or microbiology and at least 2 years of postdoctoral research experience. The successful candidate is expected to establish or have an independent research program in molecular mechanisms of bacterial resistance or bacterial pathogenesis. Qualified applicants should send a description of research interests, curriculum vitae, and names of three references to: **John Molayi, M.D., Hahnemann University, Broad and Vine, Philadelphia, PA 19102.**

Affirmative Action/Equal Opportunity Employer.

MOLECULAR/CELLULAR BIOLOGIST. The Department of Biology at the College of St. Catherine seeks a molecular/cellular biologist to fill a tenure-track position at the level of **ASSISTANT OR ASSOCIATE PROFESSOR** beginning in the fall of 1991. A Ph.D. is required and postdoctoral experience is preferred. The successful candidate will be able to develop and maintain an active research program in which undergraduates can become involved. Excellence in teaching is highly desirable. Courses to be taught include a sophomore-level course in cell biology and an upper-level course in molecular biology. Involvement in introductory courses is expected. Send curriculum vitae, transcripts, three letters of recommendation and a statement of research and teaching interests to: **Dr. Jacqueline Brehe, Chair, Biology Department, The College of St. Catherine, 2004 Randolph Avenue, St. Paul, MN 55105.** Application deadline is 11 January 1991. *Equal Opportunity/Affirmative Action Employer.*

EAST TENNESSEE STATE UNIVERSITY

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

MOLECULAR MICROBIOLOGIST. The University of Alabama is seeking applicants with research interests in the area of the regulation of gene expression of microorganisms for a tenure-track position. The appointment will be made at either the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The successful candidate must have a Ph.D. degree and postdoctoral experience and will be expected to establish a productive research program and contribute to the instructional program in microbiology at the introductory and advanced levels. Applicants should submit curriculum vitae, statement of research interests, reprints of recent publications, and the names, addresses, and telephone numbers of three references to: **Dr. Paul A. LeBlanc, Chair, Search Committee, Department of Microbiology, Box 870334, The University of Alabama, Tuscaloosa, AL 35487-0334.** Review of applications will begin 15 February 1991 and continue until a suitable candidate is found. *The University of Alabama is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

EUKARYOTIC MOLECULAR CELL BIOLOGIST AND POPULATION GENETICIST

Jacksonville State University invites applications for two tenure-track positions at the **ASSISTANT AND/OR ASSOCIATE PROFESSOR** rank in the biology department: (i) eukaryotic molecular cell biologist; (ii) population geneticist. Applications from either plant or animal biologists invited. Excellence in teaching and working with undergraduate and graduate student research is required. Development of advanced course(s) and participation in at least one of the following areas is expected: introductory biology; a majors core of molecular cell biology, genetics or ecology; vertebrate biology; and human anatomy and physiology. A Ph.D. is required. Access to a Cray I supercomputer is available; new building in planning phase.

Interested applicants should submit, by 15 January 1991, their curriculum vitae, names of three references, a statement of teaching and research interests, and unofficial transcripts to: **Personnel Services, Jacksonville State University, Jacksonville, AL 36265.** An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE PROFESSOR

Research-track position in gastroenterology laboratory working with experimental animals and cell systems in cholesterol and lipoprotein metabolism. Must be experienced in methods for in vivo cholesterol synthesis, in vivo lipoprotein transport, and various analytic techniques related to quantitation of lipoproteins, sterols, fatty acids, and bile acids. Also involves teaching medical students/postdoctoral fellows in lipid field.

Send résumé and three letters of reference to: **John M. Dietschy, M.D., University of Texas Southwestern Medical School, 5323 Harry Hines, Dallas, TX 75235-8887.**

Affirmative Action/Equal Opportunity Employer.

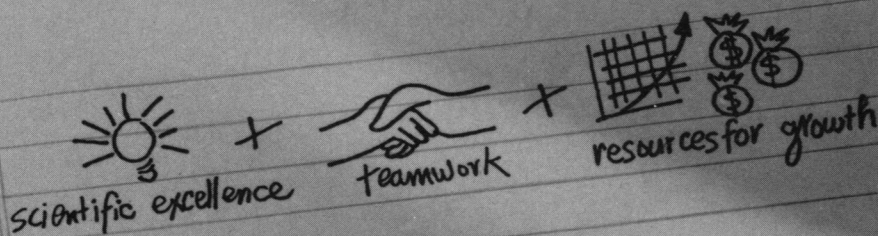
ASSOCIATE PROFESSOR/PROFESSOR

The Department of Neurology at the University of Minnesota Medical School seeks an M.D., Ph.D. neurologist/neuroscientist for a tenured associate professor/professor position. The candidate must have an M.D., Ph.D., completed clinical and laboratory research postdoctoral studies, demonstrated ability to carry out peer-review funded independent research, and Board-eligible in neurology. The candidate will be expected to establish a laboratory investigating the electrophysiology and regulation of neuronal calcium channels, including the influence of opiates and antiepileptic drugs on calcium currents. He or she should have experience and facility with contemporary neurophysiology techniques. Additionally, the candidate should have a record of involvement with neurology resident education. This associate professor/professor will serve as an attending physician on the neurology service and will participate in the teaching of residents, undergraduates, and graduate students. Applicants should send curriculum vitae by 31 January 1991 to: **Richard W. Price, M.D., Professor and Head, Department of Neurology, Box 295, UMHC, Harvard Street at East River Road, Minneapolis, MN 55455.**

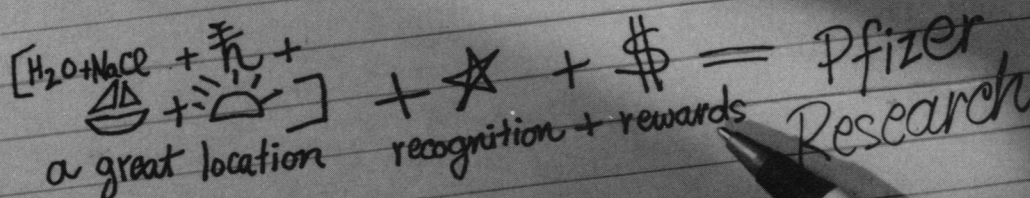
The University of Minnesota is an Equal Opportunity Employer and specifically invites and encourages applications from women and minorities.

SUPERVISORY PHYSICAL SCIENTIST or SUPERVISORY METEOROLOGIST, GM-13/14, salary: \$42,601 to \$50,342. Department of Commerce, NOAA, National Climatic Data Center, Asheville, North Carolina. As chief, Advanced Projects Group, directs, plans, and implements large-scale data management systems. Utilizes Storm, AWIPS-90, Polar Orbiting and Geostationary Satellite Systems, Microart, Profiler, and NEXRAD. Plans, designs, and coordinates development of major scientific and data management software systems. Performs advisory duties on systems design and data management projects and develops long-range plans. A degree in meteorology or physical science with related courses is required plus 1 year of professional experience equivalent to the next lower grade in federal service. Knowledge of computer systems and programming desirable. *U.S. citizenship is required.* Closing date: 28 December 1990. Call **Ms. Long** for information at **804-441-6548.** *The Department of Commerce is an Equal Opportunity Employer.*

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BS/MS Scientists

If you have relevant laboratory experience and strong theoretical knowledge, take advantage of this opportunity to join multi-disciplinary teams in one of the following areas:

Molecular Genetics—Develop DNA sequencing methods/technology and maintain a program for sequencing cloned genes.

Cellular Electrophysiology—Use patch-clamp recording and video imaging technologies to investigate the role of lymphocyte ion channels in autoimmune diseases.

Applied Biotechnology—Create, develop and implement state-of-the-art assay methodologies leading to novel human therapeutics for several diseases.

Cellular Immunology/Biochemistry—Perform *in vitro* T lymphocyte activation, signal transduction and ion channel studies, and determine intracellular mechanisms of immunosuppressive agents.

Neurochemistry—Study pharmacotherapy of mental illness and central nervous system disorders.

Atherosclerosis—Develop screens for the identification of novel anti-atherosclerosis agents.

Immunology/Biochemistry—Investigate immune response during parasitic infections.

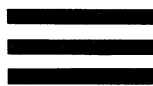
Our excellent benefits include competitive salaries, health and dental care, paid holidays and vacations, savings, investment and pension plans, and relocation assistance to our attractive Connecticut shore location.

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Research And Development Opportunities

The Dade Division of the Fortune 75 Baxter Healthcare Corporation is a leading supplier of diagnostic products and instrumentation for clinical laboratories. Continued growth and expansion has led to R & D opportunities in our Stratus® Reagent, Product Support and Immunology R & D groups. These positions require highly motivated, results-oriented individuals with strong technical, communication and organizational skills.

Scientists/ Project Leaders

Stratus® Immunoassay System

The successful candidates will work with an exciting technology which has proven to be one of the most rapid and versatile means of automated enzyme immunoassay available today.

Reagent R & D Project Leaders supervise assay development project teams which are responsible for assays from their inception until their release to the marketplace. Besides the supervision of project team members, project leaders are expected to participate as members of their project teams at the bench.

Product Support R & D Scientists are talented scientists who supervise multi-disciplinary project teams which are responsible for product support and product improvement. These individuals must interact daily with Quality Control and Manufacturing.

The ideal candidates for these positions will have a Ph.D. in a life science or an equivalent combination of education and work experience. These individuals will be well versed in EIA techniques with hands-on experience in their design and validation. Candidates with prior industrial experience will be given greater consideration.

Scientists/Associates

Immunochemistry and Immunology

Positions are available for experienced individuals to become members of the Immunology R & D group. Successful candidates will generate and develop the critical immunological reagents needed for new products.

Immunochemistry R & D Scientists must have at least an MS degree in a field related to immunochemistry and at least 6 years experience. Candidate with 4 or more years experience beyond Ph.D. degree will also be considered. Ideally, a candidate will have developed methods for purification and characterization of immunoglobulins and other proteins for use in commercial assays. Candidates who has used innovative approaches will be given preference.

Immunology R & D Associates must have at least a BA or BS degree in a life science and at least 2 years laboratory experience. Ideal candidate will have generated and developed at least one hybridoma for the use in a commercial assay.

We offer an excellent scientific environment, supported by a highly competitive salary and complete benefits package. For confidential consideration, please send your resume with salary history in confidence to: **Baxter Healthcare Corporation, Human Resources, East Facility, #348, P.O. Box 520672, Miami, FL 33152.** Equal Opportunity Employer. We Conduct Pre-Employment. Drug Screening.

Dade Division

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Research

DIRECTOR/VICE PRESIDENT PHARMACEUTICAL RESEARCH

ENZON is a development stage biopharmaceutical company with a unique and broad scale technology which enhances the delivery and therapeutic value of proteins and enzymes. Research is the core strategy of this corporation.

We seek an extremely imaginative and knowledgeable research leader who can demonstrate current expertise and excellence in protein chemistry, polymer science or drug delivery technology. His/her role will be to capitalize on ENZON's current dominant position and create new technological thrusts.

Candidate requirements include: Ph.D. in chemical, biological, pharmaceutical or related science with a proven 5-10 year record; leadership recognition within the scientific community and key publications in any of the following fields: protein chemistry, polymer science, or drug delivery technology.

In addition to this entrepreneurial opportunity to develop required staff and laboratory facilities, ENZON offers a collegial and humanistic atmosphere that encourages personal and professional growth. Salary is in the 6 figures+ range along with outstanding benefits and liberal stock options. Please send resumé to: **Human Resources.**

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EXECUTIVE DIRECTOR WASHINGTON TECHNOLOGY CENTERS

The Washington Technology Centers (WTC) is seeking candidates and nominees for the position of Executive Director. The WTC is Washington State's premier university-industry collaborative research program, established in 1983 by the Washington State Legislature and designed to foster private and federal investment for commercially-promising research and technology development. WTC research activities are located primarily on the University of Washington and Washington State University campuses. As a leader in commercially-promising research and technology development in the areas of advanced materials, compound semi-conductors, computers and software, manufacturing systems, microprocessors, and medical and plant biotechnology, the WTC creates technologies for industry application with a focus on Washington State. The Executive Director has overall management and administrative responsibility for seven distinct research areas/programs, with projected biennial activity of \$27.2 million (state, federal, foundations, and industry combined) and an eleven-person headquarters staff. Functions and responsibilities: chief WTC representative to government, industry and university leadership; responsible for long-range planning, major facilities planning and acquisition; develops and implements WTC policies and procedures; and oversees intellectual property agreements. Qualifications: Broad knowledge of science and engineering, Ph.D. in an appropriate field (only exceptional relevant experience will substitute for a Ph.D.). Position is available immediately. Interviews will begin early in 1991 and will continue until the position is filled. Send nominations or a resumé, names and addresses of four or more references, and a letter of interest highlighting the special skills that you could contribute to the development and success of the WTC to:

**Dean G. Ross Heath, Chair
Search Committee for the WTC Executive Director
College of Ocean and Fishery Sciences, HN-15
University of Washington
Seattle, WA 98195**

The University of Washington is an equal opportunity/affirmative action institution and encourages women and minorities to apply



**PROFESSOR AND HEAD
DEPARTMENT OF BIOCHEMISTRY
UNIVERSITY OF MINNESOTA MEDICAL SCHOOL**

The University of Minnesota Medical School invites applications for the position of Professor and Head of the Department of Biochemistry. Faculty members of the Department have major research efforts spanning a wide variety of disciplines in molecular biology, molecular biophysics, enzymology and biological regulation. Teaching of graduate biochemistry is shared among 45 research colleagues in the campus-wide biochemistry graduate program, which currently is training over 90 Ph.D. students.

We seek a candidate with outstanding academic and scientific credentials who can lead the Department and stimulate interaction with the community of biological scientists within the Medical School and the broader University. Candidates must have a doctoral degree and an internationally-recognized and active research program and warrant tenure at professor rank in accordance with University and college policies. Salary is competitive and negotiable. Starting date is July 1, 1991 or as soon as possible.

Interested candidates who meet the qualifications described as requested to submit a current curriculum vita documenting their qualifications and professional accomplishments. The deadline for receiving applications is March 1, 1991. Please send to:

Dr. Alfred F. Michael
Chairman, Search Committee for Head
of Biochemistry
Box 391 UMC
UNIVERSITY OF MINNESOTA
516 Delaware Street S.E.
Minneapolis, MN 55455

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

**VICE PROVOST AND DEAN
COLLEGE OF AGRICULTURE AND NATURAL RESOURCES
Michigan State University**

Michigan State University invites applications and nominations for the position of Vice Provost and Dean, College of Agriculture and Natural Resources. The Vice Provost and Dean is the chief executive officer of the College and is responsible to the Provost and the President for the general administration of the College. The Associate Dean/Directors of the four administrative units making up the College (the Agricultural Experiment Station, the Cooperative Extension Service, the Office of Academic and Student Affairs, and the Institute of International Agriculture) report to the Vice Provost and Dean.

Michigan State University, founded in 1855, is the pioneer land-grant institution in the United States and a member of the Association of American Universities. The College of Agriculture and Natural Resources, one of MSU's fourteen academic colleges is the unit responsible for the legislatively appropriated funds for the Michigan Agricultural Experiment Station and the Michigan Cooperative Extension Service and has administrative relationships with five of the other colleges. Teaching, research, extension and international programs are jointly administered at the departmental level with many of the faculty having multiple appointments across program areas, departments and colleges. As such the Vice Provost and Dean administers a major area of academic activity involving complex programmatic and budgetary aspects which impact across much of the University.

Applicants must have an earned doctorate and teaching, research and service credentials to meet the standards for appointment as a full professor with tenure in one of the College's academic departments or schools. In addition, the individual must have experience in and an understanding of agriculture and natural resource systems with a demonstrated knowledge of the land-grant philosophy and its directed teaching, extension, research and international missions. Expected starting date is no later than July 1, 1991.

Applications and nominations are requested as soon as possible, preferably by January 15, 1991. Applications and nominations should be sent to:

Dr. Larry G. Hamm, Chairperson, Search and Rating Committee, Vice Provost and Dean of College of Agriculture and Natural Resources, c/o Office of the Provost, 432 Administration Building, Michigan State University, East Lansing, MI 48824.

MSU is an Affirmative Action/Equal Opportunity Institution

Medical Director Cancer Program

Portland, Oregon

The Oncology Program and Chiles Research Institute of Providence Medical Center, and the Division of Hematology and Oncology, Department of Medicine, Oregon Health Sciences University (OHSU) jointly seek candidates for the position of: Director of the Cancer Program of Providence Medical Center with additional appointments, commensurate with qualifications, to the research staff of the Chiles Research Institute and the faculty of the Oregon Health Sciences University.

Providence has the largest number of new cases (approximately 1600 annually) of neoplastic disease diagnosed at a community hospital in the State of Oregon. Clinical facilities include a 19-bed dedicated inpatient oncology unit staffed by seven medical oncologists, leadership in an NCI-funded Community Clinical Oncology Program, an outstanding radiation therapy department, and extensive patient support activities including hospice and cancer counseling. The Hospital also has a strong surgical oncology component.

Interested candidates should have documented skills in advancing the quality of all aspects of oncologic services; promoting clinical (i.e., medical, surgical, and/or radiation) and laboratory investigation; and participating in educational activities of and for residents, oncology staff, and the medical community. Patient care is projected as limited to referrals for investigations and/or a second opinion for another oncologist.

The Director will participate actively in the academic activities of the Division of Hematology/Oncology at OHSU. Under the leadership of Grover Bagby, M.D., investigations have focused on growth factors and hematopoiesis. Candidates with complementary interest and skills in solid tumor molecular biology and growth factors would be of special interest.

The position includes a competitive salary, generous office and laboratory space and secretarial support. Provisions for a research associate are negotiable. Candidates should have an academic rank of Associate or full Professor and documented success in competitive, peer-reviewed grant funding and journal publication.

Send inquiries and curriculum vitae to: **Fredrick C. Wagner, M.D., Chairman, Multidisciplinary Cancer Committee, Providence Medical Center, 4805 N.E. Gillsan Street, Portland, Oregon 97213, (503) 230-6014.** An Equal Opportunity/Affirmative Action Employer.

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POSITIONS OPEN

PROFESSOR OF INTERNATIONAL HEALTH POLICY

The Harvard School of Public Health is seeking a professor of international health policy to fill a tenured position in the school's faculty. The successful candidate will provide leadership in international health policy research and education in the schools' International Health Programs unit and the Departments of Population Sciences and Health Policy and Management. Candidates should have a distinguished research and teaching record in areas such as comparative studies of health policy, organizational analysis, the political processes of health policy decision-making, and the role of public, private, and international organizations in health policies and programs. Senior management experience with international health policy issues and expertise in issues facing developing countries are desirable.

Disciplinary expertise in political science, economics, or other policy-relevant social sciences is preferred. *Women and minority candidates are especially encouraged to apply.*

Please send a letter of application with curriculum vitae and a list of references to: **Dr. Peter Timmer, c/o Ms. Anne Kroncke, Harvard School of Public Health, 677 Huntington Avenue, Room 1005, Boston, MA 02115.**

CHAIRPERSON, BIOCHEMISTRY. The Medical College of Pennsylvania (MCP) invites applications and nominations for the position of chairperson, Department of Biochemistry. This department has been recently reorganized and will move to newly renovated premises in 1991. The position offers substantial scope and potential for a distinguished leader and researcher. The Medical College of Pennsylvania seeks an individual of significant stature with an established record of scientific productivity and ability to attract external funding. Applications will be accepted from individuals with expertise in any area of biochemistry. A letter of interest or nomination, curriculum vitae, and the names of at least three references should be sent to: **Walter Rubin, M.D., Chairman, Biochemistry Search Committee, 3300 Henry Avenue, Philadelphia, PA 19129. MCP is an Affirmative Action/Equal Opportunity Employer.**

DEPARTMENTAL CHAIR. The Department of Biological Sciences at the University of Alabama in Huntsville (UAH) seeks a chairperson with research expertise in microbiology; particularly immunology or other fields complementary to biotechnology. We seek candidates with strong skills in the administration of developing programs as we are proposing a biotechnology Ph.D. to add to our B.S. and M.S. programs. The university is a regional institution committed to high academic standards and has close ties to NASA's Marshall Space Flight Center and Alabama A&M University. We anticipate appointment at the senior associate or full professor level. Send curriculum vitae, a statement of research interests, selected reprints, and the names and addresses of three referees by 1 February 1991 to: **Biology Search Committee, Office of the Dean, College of Science, University of Alabama in Huntsville, Huntsville, AL 35899.**

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

The College of Charleston invites applications for the position of **CHAIRPERSON** of the Department of Biology. The College of Charleston, the 13th oldest academic institution in the United States, is a liberal arts college committed to academic distinction. The Department of Biology currently has 15 full-time faculty members and offers the following degrees: bachelor of science, bachelor of science with emphasis in marine biology, bachelor of arts, and master of science in marine biology. The department has facilities in the Science Center on the main campus and at the Grice Marine Biological Laboratory at the Fort Johnson marine laboratory complex. This is an 11-month position. Candidates must possess a Ph.D. in some area of biology. They must have substantial teaching experience in undergraduate biology courses, an ongoing research program, and successful administrative experience. Send letter of application, curriculum vitae, copies of publications, and the names and addresses of five references to: **Dr. Samuel M. Hines, Vice President for Departmental Affairs, College of Charleston, SC 29424.** The search committee will begin to review applications on 15 January 1991. *Equal Opportunity Employer/Affirmative Action.*

POSITIONS OPEN

CHAIRPERSON

Department of Physiology, School of Medicine, University of North Dakota. We invite applications from individuals holding a Ph.D. and/or M.D. degree with an outstanding record of extramurally funded research, a strong teaching record, and enthusiasm for medical student and graduate student education. We are seeking candidates from a wide spectrum of disciplines and research areas within physiology. In addition to several strong programs in cellular and molecular biology in the medical school, opportunities exist for interactions with the U.S. Department of Agriculture Human Nutrition Laboratory and with various aspects of aerospace sciences. The salary for the position will be competitive. Review of applications will begin 15 February 1991 and continue until the position is filled. Interested applicants should send curriculum vitae, a summary of research goals, and at least three letters of reference to: **Dr. Edward C. Carlson, Physiology Search Committee Chair, Department of Anatomy and Cell Biology, School of Medicine, University of North Dakota, Grand Forks, ND 58202.**

The university is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON DEPARTMENT OF ANATOMY AND CELL BIOLOGY

Nominations and applications are invited for the position of professor and chairperson of the Department of Anatomy and Cell Biology at the East Carolina University School of Medicine. The department consists of 14 full-time faculty and is responsible for the education of medical, allied health, and graduate students. The primary research interests are in endocrine physiology/cell biology, and the neurosciences. The department is well funded and well equipped. We are seeking candidates with an outstanding record of research achievement, proven administrative and leadership skills, and a history of quality teaching in any of the anatomical disciplines. Candidates should have a doctorate in anatomy or a related discipline, experience in an academic medical center, and a record of scientific excellence. Salary and benefits are nationally competitive. Candidates should submit curriculum vitae and the names and addresses of three references to:

**Dr. Paul V. Phibbs, Chairman
Anatomy and Cell Biology Search Committee
Department of Microbiology and Immunology
East Carolina University School of Medicine
Greenville, NC 27858-4354**

Screening for this position will begin on 1 January 1991. *An Equal Opportunity/Affirmative Action University. Federal Law requires proper documentation of identity and employability at the time of employment. It is requested that this documentation be included with your application.*

CHAIRPERSON DEPARTMENT OF BIOCHEMISTRY LOUISIANA STATE UNIVERSITY

Louisiana State University (LSU) invites applications and nominations for the position of chairperson of the Department of Biochemistry. The department currently consists of 12 tenure-track faculty members, all of whom hold external grants and are research active; approximately 100 undergraduates; and about 30 graduate students. The new chairperson will assist in filling two vacant positions, one of which is for a chair professor. Candidates for this position must hold a doctorate in biochemistry or a related discipline, must have demonstrated a distinguished record of scholarship and professional achievement as evidenced by publications and grant awards, and must have leadership and administrative ability consistent with qualifications. The appointment is available as early as June 1991, but the search will be continued until a suitable candidate is identified. For candidates to be considered this academic year, applications must be received by 1 April 1991. This is an anticipated position, pending final approval. Application deadline is 15 April 1991 or until suitable candidate is found. Candidates should submit curriculum vitae, and a statement of research interests and should have three references write to: **Dr. William A. Pryor, Chair, Search Committee, Department of Biochemistry, Louisiana State University, Baton Rouge, LA 70803-1806.**

LSU is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

The Philadelphia College of Osteopathic Medicine (PCOM) invites applications for the position of professor and chairperson of the Department of Microbiology. Applicants should have a Ph.D., Ph.D./D.O., or equivalent degree(s); strong leadership ability to direct the educational and research programs of the department; and a proven record in teaching, administration and biomedical research. Broad opportunities exist at PCOM, which is a recognized leader in osteopathic education, research, and clinical practice.

Applications will be accepted until 30 March 1991. Interested candidates should send their curriculum vitae and the names, addresses, and telephone numbers of three references to:

**Tage N. Kvist, Ph.D.
Chairman, Microbiology Search Committee
Department of Anatomy
Philadelphia College of Osteopathic Medicine
4150 City Avenue
Philadelphia, PA 19131**

PCOM is an Equal Opportunity Employer that offers a competitive salary and benefits package.

CHAIRPERSON. Department of Oceanography and Coastal Sciences (DOCS), Louisiana State University (LSU). The present Department of Marine Sciences will be expanding to a faculty of 25 and renamed as above. Faculty expertise ranges from geological, physical, and biological oceanography to ecology and chemistry of wetlands.

Our programmatic thrust is ecologic, physical oceanographic, geological, and geochemical studies across the land-sea interface, into coastal wetlands, and across the shelf to the slope transition. We are seeking a chair with a Ph.D. and with complementary research and teaching experience.

Mail applications, curriculum vitae, list of four references, and summary of professional goals to: **Chairman, DOCS Search Committee, c/o Stephen P. Murray, Coastal Studies Institute, Louisiana State University, Baton Rouge, LA 70803.**

Applications deadline is 1 February 1991.

LSU is an Equal Opportunity/Affirmative Action Employer. Contact Murray at 504-388-2954 (S. Murray) on telemail for further information.

HEAD OF DIVISION OF ENVIRONMENTAL SCIENCES. School of Public Health, Columbia University. The division offers a master's and a doctorate of public health. The position requires a productive researcher and administrator, as well as someone with a strong concern for teaching. The division has major teaching and research programs in (i) cellular and molecular mechanisms of carcinogenesis, mutagenesis and tumor promotion; (ii) molecular epidemiology; (iii) occupational health (with an AMA-accredited residency); and (iv) risk assessment-communication and environmental policy. Send curriculum vitae to: **Dr. Eugene Litwak, Division of Sociomedical Sciences, Columbia University School of Public Health, 600 West 168th Street, New York, NY 10032.** *Columbia University takes Affirmative Action towards Equal Opportunity.*

The Department of Pathology of the University of California, San Diego (UCSD), seeks a **DIRECTOR** of the Clinical Hematology Laboratory of UCSD Medical Center. This individual will also participate in the Bone Marrow Reading Service. Applicants should have a record of research, teaching of medical students and residents, and clinical activities sufficient to qualify for appointment as a tenure-track/tenured faculty member at UCSD. Applicants should also have Board certification in either clinical pathology or anatomic/clinical pathology and should be eligible for medical licensure in California. Subspecialty certification in hematopathology is desirable. Salary will depend upon the qualifications and experience of the candidate and will be consistent with current UCSD pay scales. Interested individuals should submit curriculum vitae and names of five references by 22 January 1991 to: **University of California, San Diego, C. Ann Rearden, M.D., Head/Division of Laboratory Medicine, Department of Pathology, 9500 Gilman Drive, La Jolla, CA 92093-0612.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

DEAN OF THE SCHOOL OF SCIENCE, MATHEMATICS, AND TECHNOLOGY

California State University (CSU), Dominguez Hills, invites nominations and applications for the position of dean of the School of Science, Mathematics, and Technology. CSU Dominguez Hills, located between Los Angeles and Long Beach in the South Bay portion of the greater Los Angeles Metropolitan area, is a comprehensive academic institution that serves a culturally diverse student body of 9400 students on campus (2700 off campus) in a variety of baccalaureate and master's programs.

The School of Science, Mathematics, and Technology has 900 students enrolled in undergraduate majors in biology, chemistry, computer science, geology, geography, mathematics, and physics. Master's degrees are awarded in biology, and quality assurance. Not only have the faculty distinguished themselves as outstanding teachers, but they have also established a productive record in scholarship and research. External funding to the school totaled \$1.0 million during the 1989-90 academic year.

Position/Duties: As the leader of the instructional, research, and service missions of the school, the dean must: create an environment that facilitates excellence in teaching, scholarship, and service; oversee strategic planning for the school; manage school resources; oversee curriculum development; recruit and evaluate faculty; continue a strong Affirmative Action program for both faculty and students; develop external support for the teaching, research, and service missions of the school; and continue development of collaborative relationships with the community, public schools, and local industry. The dean reports directly to the vice president for academic affairs.

Qualifications: An earned doctorate in a discipline traditionally associated with the sciences, mathematics, or technology. A record of excellence in teaching, research, and service; successful academic administrative experience; effective working relationships with a diverse faculty, student body, and staff; and a commitment to a strong working relationship with the private sector and public schools (K-14).

Application procedure: Applicants should submit a letter of application and interest, a résumé, and four letters of reference to the chair of the search committee at the address shown below. Applicant screening will begin on 1 February 1991 and will continue until a suitable candidate is selected. The successful candidate will be expected to assume his/her duties on or before 1 July 1991.

Dr. Richard Palmer, Chair
Search Committee for the Dean of the
School of Science, Mathematics, and Technology
California State University, Dominguez Hills
Carson, CA 90747

DEAN, COLLEGE OF GEOSCIENCES AND MARITIME STUDIES. Texas A&M University. Applications and nominations are invited for the above position. The dean reports to the provost and is the chief academic officer of the newly merged College of Geosciences and Texas A&M University at Galveston. An individual with a broad understanding of the geosciences and marine sciences is sought. The successful candidate will lead a program with internationally recognized research and the highest standards in graduate and undergraduate teaching. Forward applications to: John J. Dinkel, 119 Teague, Texas A&M University, College Station, TX 77843 by 15 January 1991.

CYTOGENETICIST. Vivigen Laboratory, located in scenic Santa Fe, has an opening for an ABMG Board-certified or Board-eligible cytogenetics **LABORATORY DIRECTOR**. Applicants should hold a Ph.D. or M.D. degree with a strong interest in clinical service. This position offers an excellent salary and benefits package. Send curriculum vitae and three references to:

Kirk Aleck, M.D.
Vivigen, Inc.
2000 Vivigen Way
Santa Fe, NM 87505

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.

14 DECEMBER 1990

PROTEIN BIOCHEMIST

Cangene Corporation, The Canadian Genetic Engineering Company, has developed a new and novel expression technology which the Company is using to produce a range of biopharmaceuticals. The Company is seeking an outstanding individual to fill a challenging position within its Biochemistry Group.

The selected candidate will contribute to the direction of the research of microbial proteases related to the Company's expression system and apply existing techniques or develop new methodologies for their isolation, purification and characterization. This individual will also be responsible for developing the knowledge required for the understanding of the proteases' mechanism of action and their activity inhibition.

The successful candidate will have:

- A Ph.D in an area related to Chemistry/Biochemistry of proteins
- Strong updated scientific background and at least three years of post-graduate experience in the area of protease activity and its inhibition
- Sound experience in isolation, purification and characterization of proteins, preferably proteases
- Ability to scientifically direct and manage small project team
- Sound verbal and written communication skills
- Ability to interact in an interdisciplinary manner.

Cangene Corporation is located near Toronto, one of North America's most livable cities. The Company offers an attractive compensation package and the opportunity to work in a highly creative, goal-oriented atmosphere.

Candidates are required to submit, in strictest confidence, quoting file #0529, their curriculum vitae and the names of three referees to: Manager, Human Resources, Cangene Corporation, 3403 American Drive, Mississauga, Ontario, Canada L4V 1T4.



The Canadian Genetic
Engineering Company

DIRECTOR

The Southern California Coastal Water Research Project (SCCWRP) is seeking a highly qualified individual to serve as the Project Director. SCCWRP is an independent public agency governed by a Commission composed of representatives of five regulatory agencies (Environmental Protection Agency, State Water Resources Control Board, three Regional Water Quality Control Boards) and four large wastewater agencies. Located in Long Beach, CA, SCCWRP was created in 1969 to research and analyze the effects of pollutants on the marine resources of the Southern California Bight and to relate these findings to existing or proposed environmental control policies and requirements.

The Director reports to the Commission and has full responsibility for administering all activities of SCCWRP. Duties include: administering organization and directing activities of scientific and other staff; coordinating development of the annual and five-year research plans; acting as spokesperson for SCCWRP; overseeing preparation of annual budget; coordinating production of annual report and other publications; coordinating activities with participating agencies; and procuring funding.

The successful applicant will possess the combination of strong managerial, scientific, and communication skills necessary to effectively lead SCCWRP. Qualifications include a demonstrated ability to manage a scientific project and a staff of professionals, meet goals and deadlines for work products, develop and manage budgets, work under the direction of a governing board, and speak, write and edit effectively.

Applications from qualified individuals will be accepted until January 31, 1991. Salary and benefits will be commensurate with qualifications. Please submit a detailed resume, salary history, and salary requirements in confidence to:

SCCWRP Search, LACSD, P.O. Box 4998, Whittier, CA 90607.

An Equal Opportunity Employer

POSITIONS OPEN

UNIVERSITY OF MASSACHUSETTS AT BOSTON

The Environmental Sciences Program is seeking to fill two **FACULTY POSITIONS** (rank open), one in the area of marine organic chemistry or organic geochemistry and the other in the area of phytoplankton ecology/coastal, primary production, to become part of an interdisciplinary program working primarily in coastal/estuarine systems. Ph.D. required, postdoctoral experience preferred. Teaching and advising duties will be primarily at the graduate level. Excellent laboratory facilities and support personnel are available. In addition, appointment of a research associate in support of the organic geochemist's position may be possible. Candidates at the rank of **ASSOCIATE OR FULL PROFESSOR** must provide evidence of a strong independent research program and successful teaching and direction of graduate students, while candidates at the rank of **ASSISTANT PROFESSOR** must demonstrate strong potential for same. The Environmental Sciences Program encompasses organic and inorganic geochemistry, benthic ecology, aquatic toxicology, microbial ecology, coastal and estuarine physics, marine policy, environmental economics, and environmental law. Send résumé, cover letter, and the names of at least three references to: **Chairperson, Search Committee, Environmental Sciences Program, University of Massachusetts at Boston, Harbor Campus, Boston, MA 02125-3393.** The University of Massachusetts is an Affirmative Action/Equal Opportunity/Title IX Employer. Applications received by 15 January 1991 will be given priority consideration.

The Biology Department invites applications to fill two **FACULTY POSITIONS** as part of a new doctoral track in environmental biology in the Environmental Sciences Program: (i) A tenure-track position in ecology beginning fall 1991 at the **ASSISTANT/ASSOCIATE PROFESSOR** level. We seek a person who is conducting basic research on community or ecosystems ecology in either terrestrial or coastal marine systems. (ii) A temporary 1-year appointment (with a potential to be converted into a tenure-track position in fall 1992) at the **ASSISTANT PROFESSOR** level beginning fall 1991. We seek a person who is conducting basic research on evolutionary or population genetics of plants, animals, or microorganisms using molecular approaches. Preference will be given to applicants who also have interests in environmental issues, particularly conservation and biodiversity. Successful candidates will be expected to develop a strong research program and participate in graduate and undergraduate teaching. Ph.D. required, postdoctoral experience preferred. Salary will be commensurate with qualifications and experience. Submit curriculum vitae, a statement of research goals, and three letters of recommendation to: **Search Committee, Department of Biology, University of Massachusetts at Boston, Harbor Campus, Boston, MA 02125-3393.** Applications received by 15 January 1991 will be given priority consideration. The University of Massachusetts at Boston is an Affirmative Action/Equal Opportunity/Title IX Employer.

AQUATIC ECOLOGIST. We are seeking an outstanding candidate, for a **TENURE-TRACK POSITION** within the Department of Zoology, whose research program seeks to test current ecological theory with rigorously designed field experiments in aquatic systems. The successful candidate will join an active group in aquatic ecology working at the applied-basic science interface. Preference will be given to candidates with substantial experience with manipulative experiments in the field, with experimental design and its mathematical underpinnings, and whose research seeks to understand the structure of multispecies assemblages of animals or animals and plants. In addition to maintaining a vigorous extramurally funded research program and directing graduate students, the position requires teaching at the undergraduate and graduate levels. Exceptional candidates will be considered for appointment at an advanced level. The appointment will begin in autumn of 1991. Application materials, including curriculum vitae, a brief description of research and teaching goals, reprints, and three letters of reference, should be submitted by 15 February 1991 to: **Aquatic Ecologist Search Committee, Department of Zoology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210.** The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly encouraged to apply.

POSITIONS OPEN

FACULTY POSITION IN NATURAL RESOURCE BIOMETRICS

Applications now being accepted for a 12-month, tenure-track position in natural resource biometrics at the **ASSISTANT PROFESSOR** level. Applicants should have a Ph.D. in a natural resource science, expertise in biometrics, and knowledge and experience in the use of geographic information systems. For information write: **Dennis C. Le Master, Head, Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907. Telephone: 317-494-3590.** Purdue University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOCHEMICAL PHARMACOLOGY

The Department of Pharmacology at the University of Alabama at Birmingham invites applications for a position of **RESEARCH ASSISTANT PROFESSOR** to complement faculty with research interests in cancer, AIDS, and AIDS-related opportunistic infection. Send letter of application with curriculum vitae and names of three references to: **Robert B. Diasio, M.D., Chairman, Department of Pharmacology, Box 600, Volker Hall, University of Alabama at Birmingham, Birmingham, AL 35294.** Equal Opportunity/Affirmative Action Employer.

CHEMISTRY FACULTY Eastern Michigan University. Two tenure-track positions available fall 1991 at **ASSISTANT PROFESSOR** rank. Will teach introductory courses and graduate/undergraduate courses in specialty. Of primary interest are: synthetic/inorganic chemistry, materials/polymers, and toxicology. Ph.D. strongly preferred, master's plus 18 hours minimum required. Review of credentials will begin 15 January 1991 and continue until finalists are selected. Send résumé, graduate and undergraduate transcripts, statement of research interests, and three letters of recommendation to: **Position FA91045, Eastern Michigan University, 310 King Hall, Ypsilanti, MI 48197.** Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN MOLECULAR BIOLOGY

The Department of Biological Science, California State University, Fullerton, invites applications for a tenure-track faculty appointment (preferably at the **ASSISTANT PROFESSOR** level) in molecular biology. Qualifications include a Ph.D. and at least 1 year of postdoctoral research experience. Successful candidates will be expected to participate in undergraduate and graduate teaching and to establish an independent, productive research program. Teaching to include genetics and molecular biology courses. Salary will be commensurate with experience. Applicants should submit curriculum vitae, representative reprints, and brief statements describing teaching and research experience, interests, and plans. In addition, three letters of recommendation should be forwarded separately to: **Molecular Biology Search Committee, Department of Biological Science, California State University, Fullerton, Fullerton, CA 92634-9480.** Deadline for application is 15 February 1991.

Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION, MICROBIAL PATHOGENESIS. The Department of Microbiology at the Medical College of Ohio invites applications for a one tenure-track faculty position at the **ASSISTANT/ASSOCIATE PROFESSOR** level for a new program in microbial pathogenesis. Candidates are being sought who have demonstrated excellence in research and whose investigations embrace modern approaches to understanding bacterial, viral, fungal, or parasitic disease mechanisms. Successful candidates are expected to develop independent externally funded research programs and to contribute to the teaching of medical and graduate students. Our laboratory and support facilities are outstanding. In addition, generous start-up funds will be provided. Salaries are competitive and commensurate with experience. Submit curriculum vitae, a statement of research goals, and three letters of recommendation by 31 March 1991 to: **Earl H. Freimer, M.D., Chairman, Department of Microbiology, Medical College of Ohio, P.O. Box 10,008, Toledo, OH 43699.** The Medical College of Ohio is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS INSTITUTE OF GERONTOLOGY THE UNIVERSITY OF MICHIGAN

New opportunities exist in the biomedical and social/behavioral sciences. We are seeking individuals with a proven record of outstanding quality and accomplishment with respect to refereed publications and peer-reviewed research grants. Salary, start date, and the possibility of a joint appointment to an appropriate academic department are negotiable. The University of Michigan is an Equal Opportunity/Affirmative Action Employer. Reply in confidence to: **Dr. Richard C. Adelman (telephone: 313-764-3715), Director, Institute of Gerontology, University of Michigan, 300 North Ingalls Street, Ann Arbor, MI 48109-2007.**

MICROBIOLOGIST SWARTHMORE COLLEGE

The Biology Department of Swarthmore College seeks a microbiologist for a 1-year **FACULTY POSITION** beginning September 1991. Teaching includes introductory microbiology, an advanced undergraduate course preferably in the area of molecular biology, and participation in introductory biology. Ph.D. required. Please send curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: **Dr. John B. Jenkins, Department of Biology, Swarthmore College, 500 College Avenue, Swarthmore, PA 19081-1937.** Review of applications will begin on 31 January 1991 and continue until a successful candidate is found. Women and minorities are encouraged to apply. Swarthmore College is an Equal Opportunity Employer.

MOLECULAR GENETICS FACULTY POSITION DEPARTMENT OF BOTANY UNIVERSITY OF TORONTO

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level commencing 1 July 1991. Applicants should have at least 2 years of postdoctoral experience and must be committed to maintaining a high calibre, independent research program that uses molecular genetic approaches to studies on plants, algae, fungi, or plant pathogens. Responsibilities also include teaching at the undergraduate and graduate levels. Curriculum vitae, a statement of research and teaching interests and three letters of recommendation should be sent by 1 February 1991 to: **Dr. J. A. Hellebust, Chairman, Department of Botany, University of Toronto, 25 Willcocks Street, Toronto, Ontario, Canada, M5S 3B2. Telephone: 416-978-3537; FAX: 416-978-5878.**

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents (landed immigrants) of Canada. The University of Toronto encourages both women and men to apply for the position.


THE UNIVERSITY OF CHICAGO IMMUNOLOGIST

The Committee on Immunology and the Department of Surgery of the University of Chicago are seeking applicants for at least two **FACULTY POSITIONS** (one junior and one senior position). We are committed to developing strong programs in the molecular aspects of the immunology and transplantation. We are seeking outstanding individuals who are using the approaches of molecular biology or cell physiology to examine basic mechanisms of antigen recognition, cell signaling events, or regulation of transplant rejection. Existing related research programs in the Committee on Immunology and The Department of Surgery include molecular and genetic aspects of T lymphocyte activation and regulation, modulation of transplantation rejection responses, and the structural aspects of T cell receptor/MHC antigen recognition. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise.

Letters of application, including curriculum vitae, bibliography, a brief statement indicating research interests, and the names of three references, should be sent to: **Dr. Jeffrey A. Bluestone, Chairman, Committee on Immunology, The University of Chicago, Box 424, 5841 South Maryland Avenue, Chicago, IL 60637.**

An Equal Opportunity Employer.

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.



Space Life Sciences Research

Division of Biology Kansas State University

Interested?
Contact:
Space Life Sciences
Division of Biology
Ackert Hall
Kansas State
University
Manhattan, KS
66506

The Division of Biology at Kansas State University is offering **Graduate** and **Postdoctoral** research opportunities in space biology. These studies are supported by two NASA Centers for Space Life Sciences Research in the Division.

- ◆ **The Center for Gravitational Studies in Cellular and Developmental Biology, A NASA Specialized Center of Research and Training (NSCORT)**
- ◆ **BioServe Space Technologies, A NASA Center for the Commercial Development of Space (CCDS).**

Kansas State University is an equal opportunity/affirmative action employer.



THE INTERNATIONAL RICE RESEARCH INSTITUTE (IRRI)
seeks a

SCIENCE EDITOR AND WRITER

Responsibilities:

- Edit scientific publications in English on rice research and production. Scientists in national rice programs of Asia are the main target audience. English is a second language for most of IRRI's readers, so publications must be in clear, tight English.
- Write press releases and other "public awareness" materials for the general public and special audiences.
- Communicate the significance of research to donors and policymakers.

Qualifications:

- Native English-language proficiency.
- A strong background in both science and journalism. Preference will be given to holders of B.S. degrees in agricultural or science journalism.
- M.S. or Ph.D. desired, but extensive editorial experience is more important than advanced degrees.
- Willingness and ability to work long hours, including weekends when necessary, to meet tight deadlines.
- Ability to work in a multicultural environment.
- This is **not** a position for an editor/writer who sees his job only as making manuscripts grammatically correct. The editor must be able to rewrite and condense manuscripts by 20-30%.

The Editor will live near IRRI headquarters on the campus of the University of the Philippines at Los Banos, 60 km south of Manila. Salary and benefits commensurate with those of other international institutions and agricultural programs.

IRRI is an international, non-profit, agricultural research institute funded by about 30 donor nations and organizations. Its goal is to enhance rice production and sustainability.

Deadline for application submission: 15 January 1991. Date position opens: March 1991. Submit curriculum vitae and the names of three references to

Dr. Klaus Lampe, Director General
IRRI, P.O. Box 933, 1099 Manila, Philippines
Tel. 63-2-818-1926.
FAX: 63-2-818-2087



PAUL SCHERRER INSTITUTE

A large National Research Institute, affiliated to the Swiss Federal Institute of Technology

Experimental Chemist/Geochemist/ Solution Chemist

A postdoctoral position (three-years' term) at our Hot Laboratory Section is available to explore interactions of radionuclides with rocks. These investigations involve lab scale infiltration and diffusion experiments to study the transport behaviour of radionuclides. The work is aimed at providing data for safety assessment work within the nuclear waste management programme at PSI and is also related to field migration experiments, presently at the Grimsel test site of Swiss Cooperative for the Disposal of Nuclear Waste (NAGRA).

The successful candidate will have a good background in inorganic/radiochemistry and physical chemistry (particularly surface chemistry). A good theoretical understanding of mass transport properties in solids would be an advantage.

Informal inquiries may be made to Dr. K. J. Bischoff (tel. 0041 56 99 22 90) or Dr. R. M. Cornell (0041 56 99 22 03).

Written applications including complete curriculum vitae, list of publications and the names of two referees are invited to

PAUL SCHERRER INSTITUTE, Würenlingen & Villigen, Personnel Division, ref.code 4334, CH-5232 Villigen PSI, Switzerland

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

The District is a 16-county regional agency responsible for the management of water resources in the most urbanized area of Florida. The agency has direct responsibility for environmental research and management for the Kissimmee River, Lake Okeechobee and over 1 million acres of Everglades.

The Environmental Sciences Division is expanding and has 3 new positions available for Ph.D. or M.S. candidates with these qualifications:

SUPERVISING PROFESSIONAL – An experienced limnologist/aquatic biologist is needed to supervise and coordinate research on Okeechobee and other south Florida lakes. Familiarity with ecological modelling and experience in personnel and contract administration preferred.

RESEARCH ENVIRONMENTALISTS – (2 positions) One position requires an experienced wetland ecologist with a background in nutrient cycling to conduct and coordinate research in Everglades wetlands and in a nutrient removal project. The other position requires an ecologist to conduct and coordinate research on remote sensing of south Florida wetland vegetation. This position requires research experience and expertise in image processing. Familiarity with GIS systems is desirable.

We offer competitive salaries and a benefits package that is one of the finest in the public sector. For consideration, please send your resume to: **Linda M. Starr, Division of Human Resources, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416, or telephone 305/687-6362.** Smoke-free workplace. EOE-M/F/H/V.



University of Tromsø

ASSOCIATE PROFESSOR/ ASSISTANT PROFESSOR in Microbiology

at the Department of Plant Physiology
and Microbiology.

Applicants should have active research
interests in plant/microbe interactions
and experience with molecular biology
and genetics techniques.

Teaching responsibilities will include
general microbiology at the undergrad-
uate level and supervision of graduate
students. Applicants have to be able to
teach in some of the Scandinavian lan-
guages (Norwegian, Swedish, Danish) or
in English.

*The gross salary will be within the range
NOK 179.704 - 241.424 per year depending
on qualifications.*

*Applications should be sent in 5 copies
together with the relevant certificates to:*

**The University of Tromsø,
The University Director, Breivika,
N-9000 TROMSØ, NORWAY.**

**Closing date for applications:
28. February 1991.**

*Full directives for application can be obtained
at the abovementioned address. For further
information contact Prof. O. Junttila or
Administrative leader S. Labugt, Institute of
Biology and Geology, University of Tromsø,
Breivika, N-9000 Tromsø. Tel. 47 83 - 44 430
or 44 388.*

FRANZT, WISSE

NATIONAL INSTITUTE OF MENTAL HEALTH
ALCOHOL, DRUG ABUSE AND
MENTAL HEALTH ADMINISTRATION
U.S. PUBLIC HEALTH SERVICE

POSITIONS AVAILABLE: HEALTH SCIENTIST ADMINISTRATORS AND MEDICAL OFFICERS

The Division of Extramural Activities (DEA) of the National
Institute of Mental Health (NIMH) is seeking applications from
experienced scientists/researchers for several Health Scientist
Administrator/Medical Officer opportunities. DEA is responsible
for managing scientific and technical peer review of grant
applications and contract proposals for NIMH. These reviews
are performed by Initial Review Groups composed of experts in
the field, and DEA's Health Scientist Administrators work with
the Groups and guide them through the review processes.

Applicants should have experience in neuroscience, or in the
behavioral, sociological, or general biomedical sciences perti-
nent to mental health. An M.D., Ph.D. or equivalent training in
these fields is also required. In addition, candidates must have
significant research experience, excellent oral and written
communication skills, as well as a recognized interest in and a
capacity for extramural science management. The grades of
these positions are GM-13 or GM-14. The 1991 salary range is
expected to be \$44,348 to \$68,129 per annum (up to \$75,945
for Medical Officers). Medical Officers may be eligible for an
additional physicians comparability allowance (PCA) of \$3,000
to \$10,000 per year.

Full Federal benefits are provided including retirement, health
and life insurance, and sick and annual leave. The duty station
is Rockville, Maryland. U.S. citizenship is required.

Vacancies will be filled through the Civil Service or through an
appointment in the Commissioned Corps of the Public Health
Service. Minorities and women are encouraged to apply.
Interested applicants should submit an Application for Federal
Employment, (SF-171) and Curriculum Vitae to: Ms. Diane
Moxley, NIMH Personnel Office, Room 15C-12, 5600 Fishers
Lane, Rockville, Maryland 20857, or call (301) 443-9094.
Applications for this announcement will be accepted through
February 28, 1991.

ADAMHA is an Equal Opportunity Employer



IDEXX Corp., a Portland-based world leader in
bioremediation products for the animal health and
food quality industries, is currently seeking a
Research Scientist and Research Associate for
full-time positions in our Cellular and Molecular
Biology Group.

RESEARCH SCIENTIST MOLECULAR IMMUNOLOGY

The successful candidate will conduct and su-
pervise research leading to novel and improved
methods for assessing immune status. A Ph.D.
with 3-5 years experience in molecular immuno-
logy is required. Direct experience with the devel-
opment and use of Band T cell fusion partners,
cDNA cloning, PCR amplification and gene
expression is preferred. Previous supervisory
experience desired.

RESEARCH ASSOCIATE MONOCLONAL ANTIBODY RESEARCH

This candidate will assume a lead role in our
monoclonal antibody laboratory which serves
both manufacturing and research and develop-
ment needs of our company. We require a BS or
MS and 3-5 years relevant experience that in-
cludes a strong background in monoclonal anti-
body production and antibody based assays.

Interested applicants should forward a resume
and salary requirements to:

**Human Resources Department
IDEXX Corp.
100 Fore St.
Portland, ME 04101
EOE**



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 five 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 Appointments Officer,
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 A\$28,792-A\$32,762. The
closing date for applications is 31 March 1991.

Enquirers should briefly indicate the research discipline of
interest to them. Further information, from the Appointments
Officer, La Trobe University, Bundoora, Victoria, 3083,
Australia. Fax: 6 31 471 0369.

Applications (marked confidential), including reference
number, names and addresses of three referees and curriculum
vitae should be forwarded to the Appointments Officer, La
Trobe University, Bundoora, Victoria, 3083, Australia.

Equal Opportunity is University Policy.

arm43662

GRADUATE PROGRAM CELL AND MOLECULAR BIOLOGY (MULTI-DEPARTMENTAL)

- GENE REGULATION
- MOLECULAR GENETICS
- DEVELOPMENTAL BIOLOGY
- ONCOGENES AND GROWTH FACTORS
- STRUCTURAL BIOLOGY
- NEUROBIOLOGY
- MOLECULAR VIROLOGY AND IMMUNOLOGY

The Graduate School at BAYLOR COLLEGE OF MEDI-
CINE has recently created a graduate program in CELL
AND MOLECULAR BIOLOGY stressing basic research in
the above areas. Students accepted for studies leading to the
Ph.D. degree will receive financial support. For further
information contact:

Dr. Savio Woo, Director
Graduate Program in Cell and Molecular Biology
Baylor College of Medicine, Room 185A
One Baylor Plaza
Houston, Texas 77030
Phone: (713) 798-6557

Research Opportunities in Diabetes/Metabolism

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company is seeking experienced scientists and postdoctoral candidates for its expanding efforts in diabetes and metabolism.

Sr. Research/Research Associate

Research positions are available in the Pharmaceutical Research Division for independent, highly motivated scientists to study biochemical and pharmacological aspects of metabolism and hormone action. Successful applicants for the research scientist positions will possess an MD or PhD in biochemistry, pharmacology or physiology with 2 - 5 years' postdoctoral experience in metabolism. These individuals will join a multidisciplinary effort to study the pathophysiology of hormonal disorders such as insulin resistance pertaining to diabetes, obesity and cardiovascular diseases. Experience with in vivo pharmacological methods for the evaluation of animal models of these diseases is an advantage. However, ability, enthusiasm and motivation are more important than the precise nature of previous experience.

Postdoctoral Research Fellowships

The postdoctoral positions will focus on the cellular and molecular aspects of hormone action. Current areas of study include: 1) molecular mechanisms of insulin action, 2) hormonal regulation and characterization of enzymes involved in the synthesis and hydrolysis of glycosyl-phosphoinositides, 3) covalent interactions between these lipids and target proteins, 4) identification of novel serine kinases relevant to growth factor actions, and 5) molecular characterization of hormone receptors. Applicants should be recent MD or PhD graduates in biochemistry, pharmacology or cell biology with some experience in the areas of molecular biology, protein purification and sequencing, carbohydrate structure and function, or membrane and lipid biochemistry.

Our modern facilities are located adjacent to the University of Michigan campus. Excellent compensation and benefits are only part of the package. PARKE-DAVIS fosters an exciting, dynamic and challenging research environment with ample opportunities for personal and professional creativity and growth. If you are qualified and wish to collaborate in this vital research environment, please send a curriculum vitae and a list of references, in confidence to Mr. B. Burmeister, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert, 2800 Plymouth Road, Ann Arbor, MI 48105. Refer to job #90458. "Smoke-Free Work Environment"

"Equal Opportunity in Action"



PARKE-DAVIS

A DIVISION OF **WARNER-LAMBERT**



CELGENE CORPORATION, a four year old public corporation committed to the leadership position in chemical biotechnology, has immediate openings available in its *Chiral Chemicals Unit* and in its *Biotreatment Systems Unit*.

Chiral Chemicals Unit

The individuals we seek will be specifically involved in the design & development of biocatalytic systems for the production of chiral chemical intermediates & products for the pharmaceutical, agricultural and food industries.

MICROBIOLOGIST/MICROBIAL ENZYMOLOGIST

Ideal candidate will have a Ph.D. in Microbiology as well as 3+ years biotechnology industrial experience with enzyme and/or whole cell biotransformation processes. Must be capable of taking a scientific concept through to industrial process. Prior supervisory experience preferred.

MICROBIOLOGISTS/BIOCHEMISTS

Successful candidates must possess a BS/MS in Microbiology or Microbial Biochemistry and have experience in handling a variety of microorganisms, isolation and characterization of enzymes, and familiarity with analytical procedures, i.e. HPLC, GC, UV spectrophotometer. Strong organic chemistry background and related industrial experience preferred.

ORGANIC CHEMIST

Challenging opportunity for an Organic Chemist who will be involved with biotransformation process development. Must have a BS/MS in Chemistry with strong synthetic capability, experience in enzyme catalysis, and working knowledge of HPLC, GC, UV spectrophotometer and NMR.

Bio-treatment Systems Unit

Excellent opportunities are available in this group for both entry level & experienced individuals to work on the development & scale-up of biocatalytic processes for pollution prevention.

PH.D. CHEMICAL ENGINEER

(or Ph.D. Civil/Environmental) Prior experience in microbial degradation of organic compounds required. Responsibilities include developing biologically based technology for the treatment of environmental wastes, and working both at the bench level and with pilot scale operations in the field.

MS/BS CHEMICAL ENGINEER

(or Biochemical/Environmental) Must have background in fermentation and microbiology plus 2 years relevant industrial experience. Responsibilities include defining and carrying out experiments to test and optimize immobilized cell systems in the development of biological waste treatment processes.

MS/BS MICROBIOLOGIST

Must have a background in isolation, growth and characterization of microorganisms. Successful candidate will be involved in working on the selection and development of novel microbial activities for the degradation of chemical compounds.

MS/BS MICROBIOLOGIST

Experience in anaerobic techniques is required. Candidate will be responsible for handling a research program on anaerobic degradation of halogenated aromatic compounds.

All positions require individuals that are capable of making independent observations and contributions, and possess good communication and data analysis skills. Celgene offers competitive salaries & benefits package, including an Education Assistance Program and 401(k). Our modern facility in Somerset Cty. NJ is an hour away from NYC and Philadelphia and provides an attractive working environment conducive to personal growth and professional achievement. Qualified applicants should send a detailed resume, indicating salary requirements, to: Manager, H.R. Dept. - SCI, CELGENE CORPORATION, 7 Powder Horn Drive, Warren, NJ 07059.

Equal Opportunity Employer M/F

POSITIONS OPEN

ENVIRONMENTAL SCIENTIST. Barnard College Department of Environmental Science seeks earth scientist, chemist, or biologist for **TENURABLE POSITION**. Rank open. Research opportunities in earth sciences at Columbia's Lamont-Dougherty Geological Observatory. Please send curriculum vitae, brief statement of teaching and research interests, and three letters of recommendation by 1 February 1991 to: **Dr. Julia Chase, Barnard College, Columbia University, New York, NY 10027. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available to work in vascular biology laboratory on aspects of growth control of smooth muscle cells. Applicants must have a sound background in cell biology, molecular biology, and a working knowledge of proteases would be desirable. Position available early 1991. Contact: **Dr. Michael Reidy, Department of Pathology SJ-60, University of Washington, Seattle, WA 98195. University of Washington is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available immediately. NIH-funded project entails analysis of stress wave propagation in the thorax and experiments using animal models. Research requires a background in continuum mechanics, digital signal processing techniques, and numerical analysis methods; and 2 years of experience in lung mechanics. Start date: January 1991. Stipend: \$20,000 to \$22,000. Send curriculum vitae and names of three references to: **T. Moore; Kentucky Job Service, J.O. #801441, 300 South Upper Street, Lexington, KY 40508. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. Available immediately to pursue studies defining the molecular mechanisms involved in the regulated secretion of peptide hormones. Current efforts are focused on the role of low molecular weight GTP-binding proteins in secretory granule trafficking. Experience in molecular biological techniques preferred but not required. Please send curriculum vitae to: **Dr. Gary Wilsey, Department of Heart and Hypertension Research/EF3, Cleveland Clinic Research Institute, 9500 Euclid Avenue, Cleveland, OH 44195.**

NIH-funded **POSTDOCTORAL RESEARCH TRAINING** in cell biology, molecular genetics, and protein biochemistry. Studies will be carried out in one of five well-funded laboratories studying growth factors, gene expression, and protein secretory mechanisms. Send curriculum vitae to: **Dr. Dana Graves, Department of Oral Biology, Boston University Medical Center, 100 East Newton Street, Boston, MA 02118 or telephone: 617-638-8547.**

POSTDOCTORAL POSITION IN MOLECULAR NEUROENDOCRINOLOGY

A position is available for the study of proenkephalin/prohormone paired-basic processing enzymes. Project will involve transfection and analysis of cell lines with potential processing enzyme cDNAs and enzyme overexpression and purification. Facilities, scientific environment, and funding for these studies are excellent. The position is available immediately. Send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. Iris Lindberg, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center (LSUMC), 1901 Perdido Street, New Orleans, LA 70112. LSUMC is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION DEPARTMENT OF RADIATION THERAPY THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON

Available immediately to study the structure/function of membrane proteins associated with multidrug resistance. Experience in protein purification, membrane structure/function, signal transduction, and drug transport mechanisms advantageous. Salary commensurate with experience.

Send curriculum vitae and summary of research interests to: **James A. Belli, M.D., Chairman, Department of Radiation Therapy, The University of Texas Medical Branch, Route F56, Galveston, TX 77550.**

The University of Texas Medical Branch is an Equal Opportunity/Affirmative Action Employer. UTMB hires only those individuals authorized to work in the United States.

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study the role of central peptides, amino acids, and other possible transmitters in the central control of baroreflex activity. The research will also involve collaboration in the area of molecular biology to incorporate genetic involvement in the direct or indirect control of blood pressure regulation. Experience in neuro- or electrophysiology is desirable. Salary range is \$20,000 to \$25,000 annually and is guaranteed for 2 years. *Federal law requires proper documentation of identity and employability at the time of employment.* Send résumé and three letters of recommendation to: **Dr. W. R. Woolees, Chairman, Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC 27858. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. A position is available to study mechanisms of DNA repair in transcriptionally active genes [*Nature* 342, 95-98 (1989); *Cell* 51, 241-249 (1987)] using biochemical and molecular approaches. Recent Ph.D. in biochemistry or molecular biology and experience in molecular biology techniques required. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Isabel Mellon, Departments of Pathology and Biochemistry, University of Kentucky, Lexington, KY 40536-0093. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. Available for an organic, medicinal, or biochemistry Ph.D. to develop techniques to sequence polysaccharides. Background in carbohydrate chemistry, electrophoresis/biopolymer sequencing, enzymology, and NMR desirable. Ability to work across disciplines essential. Salary: \$23,000 plus fringe benefits. Send résumé and two letters of reference to: **Professor Robert J. Linhardt, Division of Medicinal and Natural Products Chemistry, College of Pharmacy, University of Iowa, Iowa City, IA 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer.**

MRC NERVE CELL AND SYNAPSE GROUP. Several **POSTDOCTORAL POSITIONS** are available in a newly formed group whose goal will be to combine electrophysiology, molecular biology, and imaging techniques to study factors regulating synaptic adaptation. Projects with positions still open include: (i) Modulation, expression, and cloning of excitatory amino acid receptors (D. Hampson, J. MacDonald); (ii) Factors controlling the time course of hippocampal excitatory postsynaptic currents (P. Pennefather, J. MacDonald); (iii) Relations between calcium entry, calcium buffers and calcium effects (P. Pennefather, M. Charlton, P. Carlen). Send curriculum vitae and two letters of recommendation to: **D. Hampson, Faculty of Pharmacy, University of Toronto, 19 Russell Street, Toronto, Ontario, Canada M5S 2S2.**

POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

Two postdoctoral research fellowships are available (one immediately) to study the membrane skeletal protein ankyrin. The work will focus on structure-function relationships of erythrocyte ankyrin, which we have recently cloned [*Nature* 344, 36 (1990)], on defects of ankyrin in hereditary spherocytosis [*Nature* 345, 736 (1990)], and on ankyrins in nonerythroid cells. Experience with standard cell and molecular biology techniques required. Send curriculum vitae, reprints, and names, addresses, and telephone numbers of three references to: **Dr. Samuel E. Lux, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. Telephone: 617-735-7904. FAX: 617-735-7262. Equal Opportunity Employer.**

POSTDOCTORAL POSITION IN MOLECULAR AND CELLULAR BIOLOGY. A postdoctoral position is available to study the role of serine/threonine-specific protein phosphatases in growth control and neoplastic transformation by DNA tumor viruses. Applicants should have experience in biochemistry and/or 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**

POSITIONS OPEN

POSTDOCTORAL POSITIONS LAWRENCE BERKELEY LABORATORY

Two postdoctoral positions are available immediately to participate in studies on the regulation of cell proliferation and cellular senescence, with emphasis on genes important in cell cycle progression and expression of differentiation. A recent Ph.D. within the last 4 years in cell biology, molecular biology, or biochemistry is required. Please send complete curriculum vitae and the names, addresses, and telephone numbers of two to three references to: **Dr. Judith Campisi, Lawrence Berkeley Laboratory, Job #A/6120, #1 Cyclotron Road, 90/1042, Berkeley, CA 94720. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS. Are available in research related to autoimmune diseases at the Harvard Medical School and the Center for Neurologic Diseases at Brigham and Women's Hospital. One position requires expertise in molecular biology and, in particular, experience in expression vectors and production of recombinant proteins. Other positions relate to basic immunologic studies of antigen specific tolerance in animal models of autoimmune disease and T cell receptor molecular biology. Send curriculum vitae plus names and telephone numbers of three references to: **Dr. Howard L. Weiner, Co-Director, Center for Neurologic Diseases, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

POSTDOCTORAL POSITION

A postdoctoral position is available to study globin gene regulation including identification of cis- and trans-acting elements. These studies include transgenic mice and factor purification. Résumés should be sent to: **Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0524.**

An Equal Opportunity/Affirmative Action Employer.

HARVARD UNIVERSITY

POSTDOCTORAL POSITION. Available immediately for recent Ph.D. to study the roles of pro- and antioxidants in atherogenesis. Background in oxidant stress, lipoprotein experimentation, cell culture, and HPLC desirable. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Balz Frei, Harvard School of Public Health, Department of Nutrition, 665 Huntington Avenue, Boston, MA 02115.**

POSTDOCTORAL POSITION PROTEIN BIOCHEMISTRY AFFYMAX RESEARCH INSTITUTE

We have an immediate opening for a protein biochemist to study the structures and biological activities of engineered peptides expressed in recombinant systems. These systems include libraries of peptides displayed on phage particles. This position provides an opportunity to work closely with members of the molecular biology, molecular pharmacology, and bio-organic chemistry groups to identify peptides as lead compounds for drug discovery. Experience in the study of protein structure and function, and an interest in bioactive peptides are required. Some familiarity with the techniques of molecular biology is also necessary. Send résumé, list of publications and references to: **Affymax Research Institute, Human Resources Department, 3180 Porter Drive, Palo Alto, CA 94304. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available immediately to investigate subcellular calcium regulation in cardiac muscle using analytical electron microscopy techniques (electron probe microanalysis). Applicants should have a Ph.D. and/or M.D. degree, a solid background in muscle physiology as well as a knowledge of intracellular signalling processes. Experience in electron microscopy is also desirable. The successful applicant will have the opportunity to interact with members of a growing department with research programs in cardiovascular physiology and pathology from the molecular to the clinical level. Please send curriculum vitae and a statement of research interests to: **Dr. Meredith Bond, Cleveland Clinic Foundation, Department of Heart and Hypertension Research, EF 1-31A, 9500 Euclid Avenue, Cleveland, OH 44195-5069. The Cleveland Clinic Foundation is an Equal Opportunity Employer.**

Alkermes, Inc. is a private biomedical company focused on the development of innovative systems for drug delivery across the blood-brain barrier. We seek a highly qualified scientist to join us.

TOXICOLOGIST

You should have a Ph.D. in Toxicology or a related biological science with particular expertise in *in vivo* toxicology. One to three years' experience in an industrial or contract laboratory setting is essential.

Your duties will entail managing GLP toxicology studies, including protocol design, monitoring contractors, evaluating toxicologic data, and preparing reports and summaries for regulatory (FDA) submissions. In addition, you will be involved in designing and evaluating efficacy and/or pharmacokinetic studies.

This position offers excellent salary, stock option, and benefits package in a stimulating environment with an opportunity to make a major contribution. For consideration, please send your CV, including references in confidence to: Dr. Carol Gloff, Director of Product Development, Alkermes, Inc., 26 Landsdowne Street, Cambridge, MA 02139-4234. An Equal Opportunity Employer.



Alkermes, Inc.

BIOMEDICAL ENGINEERS

Medical Devices Technology Assessment

At Eli Lilly and Company, we rely on a team of high-caliber professionals to help us identify, develop, and manufacture superior quality health care, diagnostic, and animal health products. Our success in these areas is in part due to the high quality process that we have developed to identify new technologies and important unmet clinical needs. To help us in this effort, our Medical Devices and Diagnostics Division is now seeking experienced individuals to become involved in our expanding efforts in technology assessment. Bring us your expertise and help support our worldwide reputation for quality health care.

Interacting with a wide range of personnel, you will assist in designing *in vitro*, *in vivo*, and clinical studies for device safety and efficacy, as well as conduct, review, and interpret study findings. You will also assist in reviewing relevant patents and present your recommendations to management. We seek Ph.D.s in Biomedical Engineering or the equivalent, with strengths in electrical or mechanical engineering, an emphasis on cardiovascular physiology, and 3+ years engineering experience in a medical device environment.

In addition to unprecedented programs for professional growth, we provide attractive salaries and benefits. For consideration, please send a cover letter with resume and salary requirements to: Director, Personnel, Medical Devices and Diagnostics Division, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285. Equal Opportunity Employer.



Commitment to Excellence

CHAIRPERSON AND DIRECTOR

Department of Molecular Biology and
Institute of Molecular and Cellular Biology

The University of Texas at Austin

The University of Texas at Austin is seeking a distinguished research scientist to serve as chairperson of a new Department of Molecular Biology and director of a newly created Institute of Molecular and Cellular Biology. The person, who will be appointed to an endowed chair, will have the opportunity to expand The University's strengths in molecular biology. Applicants and nominees should have a distinguished and active research career, concern for quality undergraduate and graduate education, and a desire and vision to build a molecular biology program of excellence.

Resources supporting the new institute and molecular biology program include construction of a new building for molecular biology, major renovation of existing life science facilities, six endowed chairs, and seven endowed professorships. The chairperson/director is expected to provide leadership, focus, and direction to the molecular biology efforts. This includes participating in the final design and equipment allocation for the new molecular biology building; recruiting 8-12 new faculty, including occupants of endowed chairs and professorships; and fostering interactions with faculty throughout the life sciences.

The Search Advisory Committee will accept applications and nominations until February 15, 1991. After this date, the committee may request and consider credentials from candidates nominated by responsible sources. Nominations and letters of application, accompanied by a curriculum vita, should be mailed to:

University
of
Texas
at
Austin



Dr. Bob G. Sanders, Chairman
Search Advisory Committee
College of Natural Sciences
The University of Texas at Austin
Austin, TX 78712-1199

The University of Texas at Austin is an Equal Opportunity Affirmative Action Employer

Conference I

The Second Meeting on

**The Molecular Basis of
Human Cancer****June 19-22, 1991**

Organizing Committee:

K. Alitalo

R. Dalla-Favera

M. Israel

I. Kirsch

S. Korsmeyer

N. Rosen

G. Vande Woude

B. Vogelstein

This meeting will provide a forum for the clinically oriented investigator to participate in a comprehensive exchange of research directed at the molecular biology of human cancers.

The registration fee, including campus housing and meals, is **\$450 US**. The deadline for registration and abstract submittal is **April 1, 1991**.

Conference II**Seventh Annual Meeting
on Oncogenes****June 24-29, 1991**

Organized by J. Brugge and T. Curran

This meeting continues to be a most important forum for young investigators to present and discuss their latest accomplishments in oncogene and tumor suppressor gene research.

The registration fee, including campus housing and meals, is **\$550 US**. The deadline for registration and abstract submittal is **April 1, 1991**.

Further details on these meetings, including abstract guidelines and registration materials, will be available in January 1991. To receive information, please write or FAX your request to:

Margaret L. Fanning, Conference Coordinator, FACS
P.O. Box 249 • 12120 Main Street
Libertytown, Maryland 21762
FAX • 301-898-9173

Sponsored by the Foundation for Advanced Cancer Studies, Incorporated

**POSTDOCTORAL SCIENTISTS****ANTI-INFECTIVES**

SmithKline Beecham, a worldwide leader in pharmaceutical research, has two postdoctoral positions immediately available in their Anti-Infectives HIV research group. One area deals with molecular approaches utilizing site-directed mutagenesis to identify and characterize novel targets in HIV. The other area involves molecular and virological studies of several anti-viral strategies.

Qualified candidates will have a Ph.D. in Virology, Biochemistry, Immunology or Pathology. Preference will be given to individuals with demonstrated expertise in virology, molecular biology and/or biochemistry.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. SmithKline Beecham Pharmaceuticals provides a stimulating and challenging work environment, based on creativity, commitment and teamwork. We offer an attractive compensation/benefits/relocation package. For confidential consideration, please submit your C.V. and the names of three references to: Nancy Hasson, H0165A, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals

**Senior Research
Pharmacologist****Dermatology Research**

Hoechst-Roussel Pharmaceuticals Inc., a subsidiary of Fortune 100 Hoechst Celanese, has an immediate opportunity for a research professional to join its Dermatology Pre-clinical Research Laboratory.

As a strong team player, the ideal candidate will conduct innovative biochemical research directed to the discovery of drugs for the treatment of inflammatory and hyperproliferative skin diseases.

Heavy background in assay development and chromatographic (HPLC), enzymatic, receptor binding, tissue culture and radioisotopic techniques is essential. Experience with inflammatory mediator/elcosanoid or cytokine research or leukocyte biology is a decided asset. And familiarity with *in vivo* models of acute and chronic inflammation or cutaneous hyperproliferation is a plus.

PhD required in cell biology, biochemistry, immunology, pharmacology or related field plus 1-2 years experience in an academic or industrial environment. Excellent interpersonal/speech and writing skills a must.

We offer a competitive salary, and an excellent flexible benefits package, including a 401K plan, and growth potential. For consideration, please send a resume with current earnings to: Manager, Employment Dept 3139, Hoechst-Roussel Pharmaceuticals Inc., Route 202-206, P.O. Box 2500, Somerville, NJ 08876-1258. We are an equal opportunity employer M/F/H/V.

**Hoechst-Roussel
Pharmaceuticals Inc.**

Hoechst 

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PROJECT MANAGER DRUG DEVELOPMENT

Amgen has emerged as the recognized leader in the development of innovative human pharmaceuticals through applications of biotechnology. As we continue to develop into a fully integrated international biopharmaceutical company, we are seeking an individual to contribute to project management on one of our international development teams.

The key responsibilities of this position will involve leading and coordinating biopharmaceutical development activities, including interfacing with research, clinical research and manufacturing. Qualified applicants must have a minimum of a Master's degree in the Life Sciences; a Ph.D. is preferred. Previous experience in the management of drug development projects, preferably with biopharmaceuticals, and research or clinical research is highly desirable.

Amgen provides a unique opportunity to contribute to the development of innovative new therapeutics in an environment that encourages individual creativity and initiative. **Amgen** also offers an excellent compensation and benefits package including equity participation. Our location, about an hour's drive northwest of Los Angeles, offers the best in Southern California living without the drawbacks typically associated with Los Angeles. If you have the necessary skills and would like to be a part of a company that places a high priority on its human resources, please send a resume, in confidence, to:

AMGEN, INC.
Recruitment, Dept. #564
Amgen Center
Thousand Oaks
CA 91320-1789

Equal
Opportunity
Employer

AMGEN

Research And Development Opportunities

The Dade Division of Fortune 75 Baxter Diagnostics Inc., is a worldwide leader in the development and manufacture of clinical diagnostic products and instrumentation. Through research and development, our reputation for quality products continues, creating immediate opportunities for Group Leaders in our Research & Development operation. Current opportunities include:

Group Leader **Analytical Methods Development**

The selected candidate will lead a group responsible for developing, validating and implementing precise and accurate methods of analysis for our raw materials, in-process materials and finished products.

This position requires a Ph.D. in Chemistry or Biochemistry with a strong background in state-of-the-art analytical methods development. In particular, relevant experience in purification and characterization of biological molecules and chemicals, chromatography and spectroscopy is essential.

Group Leader **Bio-Organic Chemistry**

The selected candidate will lead a group responsible for the development of enzyme conjugates for use in our Stratus® automated immunochemistry system.

This position requires a Ph.D. in Chemistry or Biochemistry with a strong background in chemical modifications of proteins, derivitization of organic molecules, as well as the development of techniques for protein-hapten and protein-protein coupling. Experience in the transfer of products from R&D to Manufacturing is vital.

For both positions, familiarity with immuno-diagnostics is required. Strong interpersonal, oral and written communication skills are a must. We are seeking candidates with 5 years medical products experience, and 2 years at the supervisory level.

The Dade Division is based on the beautiful east coast of south Florida where, in addition to paying no state or local income taxes, you will enjoy a year-round quality life-style which attracts new residents and visitors from around the world. As a member of the Baxter R&D team, you will not only enjoy an outstanding professional and scientific environment and exceptional career growth opportunity, you'll also receive a very competitive salary and benefits package.

For consideration, please send your resume, indicating position of interest, along with salary history in confidence to: **Professional Staffing, Baxter Diagnostics Inc., Dade Division East, P.O. Box 520672, Miami, FL 33152.** Equal Opportunity Employer. We Conduct Pre-Employment Drug Screening.

Dade Division

Baxter

POSITIONS OPEN

POSTDOCTORAL POSITION. Currently available to investigate molecular aspects of hormone action. Specific areas of investigation include the hormonal induction of gene expression, mechanism of insulin-like growth factor (IGF) signal transduction, action and regulation of IGF binding proteins, mechanisms of insulin resistance, and control of differentiation of hormone-producing cells. Applicant should have a relevant Ph.D. or M.D. degree and experience in molecular biology techniques and cell culture. Good communication skills and the ability to work in a highly interactive group are essential. Please submit curriculum vitae, statement of research interests, and names of three references to: **Richard W. Furlanetto, M.D., Ph.D., Strong Children's Research Center, University of Rochester Medical Center, Box 777, 601 Elmwood Avenue, Rochester, NY 14642.**

POSTDOCTORAL ASSOCIATE

To examine the design and synthesis of glucagon antagonists, and the biochemical mechanisms of action of glucagon in normal and diabetic states. Send résumé and three letters of reference to: **Professor Victor J. Hruby, Department of Chemistry, University of Arizona, Tucson, AZ 85721. The University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL ASSOCIATE. A fully funded position is available to use spectroscopic methods in the study of molecular mechanisms of fast enzymic processes. Opportunity to participate in work on site-specific mutants of carbonic anhydrase and superoxide dismutase. Recent Ph.D. with experience in spectroscopy or kinetics needed. Please send curriculum vitae and the names of three references to: **Dr. D. N. Silverman, J-267 Health Center, University of Florida, Gainesville, FL 32610-0267.**

POSTDOCTORAL RESEARCH ASSOCIATE. Position available immediately at Texas A&M University, Department of Entomology, College Station, Texas, to study the molecular biology of gene expression using recombinant forms of a genetically engineered baculovirus. Successful applicant should be trained in recombinant DNA techniques; experience in cell and tissue culture also required for the conduct of the research. Salary \$22,000 to \$25,000. Send curriculum vitae and names of three references preferably by 15 February 1991 to: **Dr. Max D. Summers, Distinguished Professor, Department of Entomology, Texas A&M University, College Station, TX 77843.**

An Equal Opportunity Employer.

The Department of Nutritional Sciences announces an opening for a **POSTDOCTORAL (M.D.) FELLOW** on an NIH training grant in human nutrition. Field of research: carbohydrate metabolism with emphasis on diabetes, nutrition, and exercise. Starting date is prior to 1 July 1991. The fellowships are limited to U.S. citizens or permanent residents. Apply to: **Dr. Norman Kretschmer, Department of Nutritional Sciences, University of California, Berkeley, CA 94720. Telephone: 415-642-7870; FAX: 415-642-4612. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE

To examine the mechanism of activation of *c-jun* transcription by protein kinase C in hematopoietic cells. Training in molecular biology is required. Salary commensurate with experience. Please send curriculum vitae and the names of three references to: **Dr. A. S. Kraft, University of Alabama at Birmingham, Division of Hematology/Oncology, 1900 University Boulevard, Tinsley Harrison Towers, 513G, Birmingham, AL 35294.**

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Available immediately. To work on molecular mechanisms of steroid hormone action. Experience with molecular biological techniques desirable but not necessary. Projects include characterization of receptor-positive cell mutants and use of an enriched library of glucocorticoid-responsive genes to study lymphocytes. Send curriculum vitae, cover letter, and three references to: **Robert W. Harrison, M.D., University of Arkansas for Medical Sciences, Division of Endocrinology, 4301 West Markham, Slot 587, Little Rock, AR 72207.**

POSITIONS OPEN

POSTDOCTORAL FELLOW. Position open for postdoctoral fellow to study systemic and renal hemodynamics and changes in vasoactive humoral substances before and after altered divalent ion nutrition. Ph.D. in physiology or pharmacology required. This position is for 2 years of support. Salary is negotiable. Closing date: 1 January 1991. Submit curriculum vitae to: **Edward T. Zawada, Jr., M.D., Professor and Chairman, University of South Dakota School of Medicine, P.O. Box 5046, Sioux Falls, SD 57117-5046. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOW

Postdoctoral positions available in a dynamic research group studying the regulation of gene expression in neuronal cells using transgenic mice model. Successful candidates will have excellent opportunity to develop own research ideas, working in well-equipped laboratories and in a stimulating research environment. Candidates must have a Ph.D. with a strong background in cell and molecular biology. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. E. Bogenmann, Childrens Hospital Los Angeles, University of Southern California, 4650 Sunset Boulevard, Los Angeles, CA 90027. Childrens Hospital Los Angeles is an Equal Opportunity/Affirmative Action 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 \$34,920 to \$36,780 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-90-081, 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 AT THE SCRIPPS INSTITUTION OF OCEANOGRAPHY (SIO)

Applications are invited for postdoctoral awards from new or recent Ph.D.s in all major areas of research conducted at SIO, including physical, chemical, and biological oceanography; marine geology, geochemistry, and geophysics; marine chemistry; marine biology; and ocean engineering. Specific areas of interest might include continental margins and coastal sciences, marine meteorology and air/sea interaction, global climate change, atmospheric chemistry, large-scale ocean circulation, marine microbiology, isotope geochemistry, remote sensing, and satellite oceanography. Awards are competitive, with major emphasis on potential for independent, creative research. Awards are for 1 year with stipends commensurate with experience, plus benefits, and a small budget for publications, travel, etc. Renewals for a second year, depending upon performance, are possible. Applications should include complete graduate transcripts, curriculum vitae, addresses and telephone numbers of at least three references, and a concise synopsis of the applicant's (i) doctoral research and (ii) research interests to be pursued at SIO. All application materials must be received by 30 January 1991. Awards will be announced in April 1991. Application and questions should be addressed to: **Chairman, Graduate Department, Scripps Institution of Oceanography, University of California, San Diego, 0208, La Jolla, CA 92093-0208. The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL AND PREDOCTORAL FELLOWSHIP POSITIONS. The University of South Florida is seeking applicants for pre- and postdoctoral fellowships in immunology, psychoneuroimmunology, and microbiology for studies of various aspects of interactions of the nervous and immune systems as well as effects of drugs of abuse on immunity and infections. Stipends are approximately \$10,500 plus tuition for first-year predoctoral students and an average of \$22,500 for postdoctoral positions. Applicants should have appropriate background and experience. U.S. citizenship or a permanent visa required. A letter of interest, curriculum vitae, and three references should be sent to: **Dr. Herman Friedman, Chairman, Department of Medical Microbiology and Immunology, MDC Box 10, University of South Florida, 12901 Bruce B. Downs Boulevard, Tampa, FL 33612. The University is an Equal Opportunity/Affirmative Action Employer.**

TWO MOLECULAR BIOLOGISTS

POSTDOCTORAL RESEARCH ASSOCIATE: Expertise in eukaryotic gene identification, isolation, and cloning (including construction and screening of libraries) is required. Experience in gene modification is desirable. **RESEARCH SPECIALIST:** Experience in plasmid construction, Northern analysis, PCR, and other molecular biology techniques is required. Contact: **Dr. Mariam Sticklen, Crop and Soil Science Department, Michigan State University, East Lansing, MI 48824. Telephone: 517-353-9140. FAX: 517-353-5598.**

POSTDOCTORAL RESEARCH ASSOCIATE. Seek Ph.D. in molecular biology to clone, express, and sequence genes from *Brucella abortus* as part of a research group funded through both USDA and state agencies. Experience in recombinant DNA and protein purification essential as well as an interest in immunology as pertains to subunit vaccine development. Successful candidate will be expected to learn T lymphocyte culture and cytokine bioassay techniques. Must be highly self-motivated, able to design/conduct independent research and collaborate with other personnel. Support for competitive salary and supplies are available for up to 3 years dependent on satisfactory progress. Send letter of experience and interests, curriculum vitae, and three references complete with address and telephone numbers to: **Dr. John H. Wyckoff III, Department of Veterinary Parasitology, Microbiology, and Public Health, College of Veterinary Medicine, Oklahoma State University, Stillwater, OK 74078-0353. Telephone: 405-744-8176. FAX: 405-744-5275.** Applications will be accepted through 1 February 1991, or until a suitable candidate has been identified. Applicant must comply with I.R.C.A. regulations. *Oklahoma State University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT (senior). For grant-funded vascular cell culture facility. Minimum requirements: M.D. degree; 3 years of experience with human and rat vascular muscle cell culture, microdissection, and cation selective fluorescent probes; successful research with minimum of five publications; three years of experience teaching medical fellows. Send curriculum vitae and names of three references by 21 January 1991 to: **Division of Nephrology, L-463, Oregon Health Sciences University (OHSU), Portland, OR 97201. OHSU is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE

Research associate who will conduct research studies on the mechanism of chromosome aberration formation and repair after treatment with radio- and chemotherapeutic agents. Studies involve tissue culture, centrifugal elutriation, cell fusion and premature chromosome condensation techniques, cytogenetic analyses, DNA filter elution techniques (alkaline and neutral), DNA ultracentrifugation techniques, DNA gel electrophoresis, measurements of radioactivity in cells, photography, and computer-assisted data analysis and graphics. Carry out semi-independent experiments in the area of cytogenetic and chromosome aberration. Ph.D. degree in biomedical sciences, 3 years of research experience in cytogenetic techniques, premature chromosome condensation, DNA damage analysis techniques and cell centrifugal elutriation techniques. Forty hours per week; \$30,000 annual salary. Contact: **Texas Employment Commission, Houston, TX, or send résumé to: Texas Employment Commission, TEC Building, Austin, TX 78770. J.O. #551584. Ad paid for by an Equal Opportunity Employer.**

Opportunities in Product Safety Assessment

Searle, a leader in pharmaceutical research, development, and marketing is expanding its Product Safety Assessment function. In order to continue our growth as a first tier organization in the quality development of safe pharmaceuticals, we are seeking candidates for the following positions:

SECTION HEAD, GENERAL TOXICOLOGY

Reporting to the Senior Director of Product Safety, the person in this position will manage and provide day-to-day scientific leadership to a staff of twenty including four Ph.D.-level personnel. This group is responsible for all systemic toxicology studies. The Section Head will also act as study director on selected studies. The position requires a Ph.D. with 10 or more years of experience in industrial toxicology with at least three years in the pharmaceutical industry. Must have at least three years experience supervising Ph.D.-level personnel. Excellent scientific, managerial, oral and written communication skills a must; DABT or ATS preferred.

VETERINARY PATHOLOGIST

Reporting to the Director of Pathology, this scientist will act as a toxicologic pathologist in the design, interpretation and reporting of safety evaluation and investigative studies of Searle compounds. The successful candidate will also collaborate with pharmacologists in designing, interpreting and reporting studies on the efficacy and mechanism of action of potential new drugs, and will act as the Product Safety representative on project teams. Requires DVM and ACVP certification. A Ph.D. or three to five years experience in a pharmaceutical company that fosters investigative studies is also required; in either case, the incumbent should have a record of research publications in referred journals. Excellent oral and written communication skills and the ability to work closely with others in study teams are essential.

CLINICAL VETERINARIAN

The incumbent in this unique position would be a member of the Toxicology Department with responsibilities centered around research in toxicology. The incumbent would perform and/or oversee routine examinations and observations of groups of animals (principally rodents and Beagle dogs) exposed to test compounds and would train technical staff to do the same. In addition, the incumbent would regularly perform ophthalmoscopic and ECG exams, provide surgical support to the Toxicology Department and help to develop other specialized techniques and animal models as needed. Qualifications include a DVM (from an AVMA accredited veterinary college) and a minimum of two to three years practical and laboratory experience. Surgical skills and at least some experience with rodents are musts. Board certification and/or advanced degree in internal medicine, surgery or ophthalmology are preferred.

OCCUPATIONAL/INVESTIGATIVE TOXICOLOGIST

Reporting to the Group Leader, General Toxicology, the scientist in the position will act as the principle occupational toxicologist for Searle. Responsibilities will include generating the data for developing material safety data sheets and airborne control objectives for Searle compounds, starting materials and process intermediates. This individual will chair Searle's Health Effects Committee and also be responsible for overseeing and coordinating programs and studies to investigate mechanisms of toxicity and clarify findings resulting from systemic toxicity studies. We require a Ph.D. with three+ years experience in occupational toxicology with a strong scientific background and interest in investigative toxicology. Training and experience in pharmacology and/or biochemical toxicology is a must. DABT/ATS certification and experience in conducting studies on contract a plus.

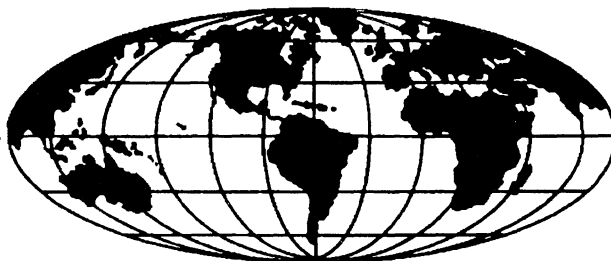
RESEARCH IN VITRO TOXICOLOGIST

This toxicologist will conduct in vitro toxicology studies in support of Searle's new drug discovery operation preparing and maintaining primary cell cultures, performing cytotoxicity, cellular function assays and helping design and conduct immunotoxicology assays. Requires MS/BS with at least two to four years experience in cell culture. Experience in the conduct of GLP studies preferable. Training and/or experience in toxicology, biochemistry, pharmacology or immunology preferred.

For superior professional and career growth, assess your opportunities with Searle. For consideration, please send your resume, in confidence, to: **Searle, Human Resources, Dept. PB10, 4901 Searle Parkway, Skokie, IL 60077.** An equal opportunity employer M/F/H.

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POSITIONS OPEN

POSTDOCTORAL RESEARCH SCIENTIST. For independent research in the area of shape selective zeolite catalysis. The research includes synthesis and characterization of these catalysts, modification of the framework structure of the zeolites to develop better catalysts for specific applications, and investigation of the kinetics and mechanism of the conversion of a diverse variety of reactants in contact with these catalysts. Research requires previous experience with MAS NMR, infrared, and x-ray diffraction spectroscopy in addition to areas described above. Applications must have Ph.D. degree in chemistry or chemical engineering. Forty hours per week; \$22,000 per year. Apply at **Texas Employment Commission, Arlington, Texas**, or send résumé to: **Texas Employment Commission, TEC Building, Austin, TX 78778, J.O. #5515165. Ad paid by an Equal Employment Opportunity Employer.**

RESEARCH ASSOCIATE. To study intracellular proteolysis and mechanisms of cellular aging. Previous research experience in molecular biology is essential, but applicants may have Ph.D., M.D., M.S., or B.S. Please submit curriculum vitae and names of three references to: **Ilene Granstein, Human Resources, 200 Harrison Avenue, Boston, MA 02111. Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE

Opportunity to conduct research toward development of a national/international, risk-based management plan for hazardous environmental chemicals. M.S. or Ph.D. in environmental science with interest or expertise in environmental policy. Some knowledge of federal/state environmental statutes desirable. Applications will be accepted until the position is filled. Send résumé and names and addresses of three references to: **Dr. Jeffrey Foran, George Washington University, Department of Health Care Sciences, Room 2B-422, 2150 Pennsylvania Avenue, N.W., Washington, D.C. 20037.**

The George Washington University is an Equal Opportunity Employer.

MOLECULAR MODELLER. National Cancer Institute, National Institutes of Health (NIH), is seeking applicants to develop models of nucleic acids and membrane proteins based on experimental data. Applicants should have knowledge of molecular biology, nucleic acid and protein structures, and computer systems, as well as an M.D. or Ph.D. degree. Salary is to be commensurate with experience. Send curriculum vitae, bibliography, and names of three references to: **Dr. Robert Jernigan, NIH, Building 10, Room 4B56, 9000 Rockville Pike, Bethesda, MD 20892. U.S. citizenship and/or permanent residency required, depending on type of appointment. NIH is an Equal Opportunity Employer.**

MOLECULAR GENETICS TECHNOLOGISTS. Vivigen, the largest clinical genetics service laboratory in the country, has an opening in its DNA diagnostic laboratory for a **CLINICAL TECHNICIAN** with a background in molecular biology. Must be familiar with recombinant DNA technology. Salary commensurate with experience. This position is now available. Send curriculum vitae and three work-related references to:

**Gail Kaplan, Ph.D.
Vivigen, Inc.
2000 Vivigen Way
Santa Fe, NM 87505**

SCIENTIST

The Salk Institute Government Services Division, engaged in the production of biologics in northeastern Pennsylvania, is seeking a scientist to join a new research and development group tasked with developing human use vaccines, vaccine-related products, and test procedures. Qualified applicants will have a Ph.D. degree in microbiology or biochemistry, experience with molecular techniques, and an understanding of modern concepts of recombinant technology. A familiarity with current good manufacturing practices and a background in immunology, and, in particular, cell-mediated immunity, would be a plus.

We offer an excellent salary and benefits package. Qualified applicants should submit curriculum vitae with salary history to: **Director of Human Resources, The Salk Institute—Government Services Division, P.O. Box 250, Swiftwater, PA 18370. Equal Opportunity Employer, M/F/H/V.**

POSITIONS OPEN

SENIOR ENVIRONMENTAL MODELER/ANALYST

The South Florida Water Management District has a new position available in the Water Quality Division. The ideal candidate will have a Ph.D. in environmental engineering, and/or science plus 3 years of experience (or M.S. with 5 to 10 years of experience) and will have demonstrated evidence of skills required to develop mathematical models of nutrient/contaminant dynamics in aquatic systems; develop models that relate nutrient/contaminant runoff to precipitation and land use; develop models for assessing water quality, quantity, and ecological tradeoffs as affected by resource management decisions; statistically analyze trends in water quality and prepare data for use in models; understand limnological systems of South Florida; and communicate results, both verbal and written.

The district offers competitive salaries, excellent benefits, sub-tropical living, and an opportunity to influence the environmental future of South Florida. Please contact: **Thomas D. Fontaine, Ph.D., Director, Water Quality Division, at 407-687-6551** for details of the position. Alternatively, send your résumé to: **Linda M. Starr, Human Resources Division, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416. Telephone: 407/687-6362. Smoke-free workplace. Equal Opportunity Employer, M/F/H/V.**

GIS/REMOTE SENSING SCIENTIST NATURAL RESOURCES RESEARCH INSTITUTE (NRI) UNIVERSITY OF MINNESOTA, DULUTH

Qualifications: Ph.D. (M.S. minimum) in ecological field emphasizing landscape-scale problems. Research experience including GIS (ARC/INFO and ERDAS) and remote sensing (Landsat) in north temperate forests. Experience with FORET-type forest models, spatial statistics, and programming (Fortran, C).

Responsibilities: Research on changes in bird communities and regional scale forest changes. GIS database creation and analysis.

NRI houses a new Natural Resources Geographic Information System Laboratory, established through an NSF Biological Facilities Grant, which specializes in the application of GIS to ecological research.

Appointment: Initially 2 years, beginning spring 1991. Possibility of continuation. Salary competitive.

Send application letter and résumé by 1 February 1991 and have three reference letters sent to:

**GIS/Remote Sensing Search Committee
Natural Resources Research Institute
University of Minnesota, Duluth
5013 Miller Trunk Highway
Duluth, MN 55811**

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

PATHOLOGY. The Department of Pathology and Laboratory Medicine at The University of California, Los Angeles (UCLA), has two positions available, one in **CLINICAL CHEMISTRY** and one in **HEMATOPATHOLOGY**. Qualifications for the clinical chemistry position include an M.D., D.O., and/or Ph.D. degree and eligibility for California licensure. Qualifications for the hematopathology position include AP/CP Board certification and experience in all aspects of hematopathology. Applicants for both positions must show demonstrated research ability and potential for an independent research program. Applications, including curriculum vitae, summary of research interests, and the addresses of four references, should be sent to: **P. A. Cancilla, M.D., Chairman, Department of Pathology and Laboratory Medicine, UCLA School of Medicine, Los Angeles, CA 90024-1732. UCLA is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.**

STAFF ASSOCIATE

FEEDBACK IN EVOLUTION. Experimental tests and models of memory and nonlinearities in evolutionary processes. Requires knowledge of experimental evolution or molecular biology and mathematical modeling. Start 1 January 1991. **Dr. Larry S. Liebovitch, Eye Research, 630 West 168th Street, New York, NY 10032. Columbia University takes Affirmative Action to ensure Equal Opportunity.**

POSTDOCTORAL POSITION

Position available for an individual with a PhD in biochemistry, cell biology or pharmacology with experience in molecular biology. The successful applicant will clone and express novel forms of adenylyl cyclase (see Science 244:1558-1564). Emphasis will be placed on determining those structural features of adenylyl cyclase subtypes that are responsible for mediating unique physiological responses.

Competitive salary and fringe benefits are available. Send curriculum vitae with the names and telephone numbers of three references to:

**Dr. John Krupinski
Weis Center For Research
Geisinger Clinic
Danville, PA 17822-2610**

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POSTDOCTORAL FELLOWSHIP in Complex Systems Studies at the Santa Fe Institute

The Santa Fe Institute will have one or more openings for postdoctoral fellows beginning in September, 1991.

The Institute's research program is devoted to the study of complex systems, especially complex adaptive systems. Systems and techniques under study include the economy; the immune system; the origin of life; artificial life; models of evolution; neural networks; genetic algorithms and classifier systems; complexity, entropy, and the physics of information; nonlinear modeling and prediction; cellular automata; and others.

Candidates should have or expect to receive soon a Ph.D. and should have backgrounds in theoretical physics or chemistry, computer science, mathematics, economics, game theory, theoretical biology, dynamical systems theory, or related fields. An interest in interdisciplinary research is essential.

Applicants should submit a curriculum vitae, list of publications, and statement of research interests, and arrange for three letters of recommendation. Send applications to:

**Postdoctoral Committee,
Santa Fe Institute, 1120 Canyon Road,
Santa Fe, NM 87501**

Applications or inquiries may also be sent by electronic mail to:

postdoc@sfi.santafe.edu

The Santa Fe Institute is an equal opportunity employer.

Application Deadline: February 1, 1991

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158 Animal Science Research Center
Tel: 314-882-7957
Fax: 314-882-6827

Plant Biotechnology

Dr. Doug Randall
117 Schweitzer
Tel: 314-882-4847
Fax: 314-882-5635

Food Engineering

Dr. Fu-Hung Hsieh
248 Ag Engineering
Tel: 314-882-2444
Fax: 314-882-1115

Send letter stating interest, resumé, three letters of reference and transcript to appropriate person listed above.



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SCIENTIST

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POSITIONS OPEN

SENIOR RESEARCH ASSOCIATE. We seek a chemical ecologist to pursue both collaborative and independent research, primarily in the areas of insect/plant defense and communication mechanisms. Some supervision and training of predoctoral and postdoctoral students will be expected. Requires at least 6 years of research beyond a Ph.D. in chemistry. Extensive laboratory experience in pheromone characterization, as well as in organic synthesis, isotopic labeling, GC, HPLC, MS, and NMR is essential. Some teaching experience is desirable. Evidence of substantial, independent scientific publication should be provided. Application deadline: 18 January 1991. Send curriculum vitae, list of publications, description of doctoral and postdoctoral research experience, and names, addresses, and telephone numbers of three references to: **Jerrold Meinwald, Department of Chemistry, Cornell University, Baker Laboratory, Ithaca, NY 14853-1301.** *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

BIOCHEMIST/MICROBIOLOGIST. To lead project purifying and studying bacterial hydrogenase. Experience in hydrogenases, protein purification, microbial techniques, metalloproteins, or enzyme immobilization desirable. Salary commensurate with experience; good possibility for permanent position at government-funded biomedical research institute. Send curriculum vitae to: **Dr. A. L. Harabin, Naval Medical Research Institute, Mail Stop 38, Bethesda, MD 20889-5055.**

STAFF ASSOCIATE

ION CHANNEL CHAOS. Single-channel recordings and modeling of ion channel proteins as a network of bonds. Requires knowledge of experimental electrophysiology and mathematics of nonlinear dynamics and neural nets. Salary: \$25-\$30,000. Start 1 January 1991. **Dr. Larry S. Liebovitch, Eye Research, 630 West 168th Street, New York, NY 10032.** *Columbia University takes Affirmative Action to ensure Equal Opportunity.*

STAFF ASSOCIATE

Nontenure-track staff research position available in the Department of Physiology and Cellular Biophysics. Candidates must possess master's degree and at least 5 years of experience in morphologic techniques (transmission and scanning electron microscopy, immunocytochemistry, perfusion fixation, photographic techniques); cell culture (especially of vascular cells); and protein biochemistry. 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.*

COURSES AND TRAINING

GENETICS SHORT COURSE 22 JULY 1991 TO 2 AUGUST 1991

32nd Annual Short Course in Medical and Experimental Mammalian Genetics. Conducted by Johns Hopkins University and The Jackson Laboratory at Bar Harbor, Maine. Morning and evening lectures covering the field are supplemented by workshops, tutorials, and demonstrations. Inquiries, applications to: **E. H. Birkenmeier, M.D., c/o Training and Education Office, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609;** or **V. A. McKusick, M.D., 1007 Blalock, Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21205.**

NATIONAL SCIENCE FOUNDATION (NSF) OCEANOGRAPHY SHORT COURSE SAN DIEGO, CALIFORNIA 23 JUNE 1991 TO 13 JULY 1991

Instructors of undergraduate courses with marine science content will receive current information in ocean research, hands-on experience in sampling and data analysis, and new teaching materials. Project director is **Dr. Richard Phillips** of the University of San Diego, where participants will live, and earn three graduate units in marine studies. Funding covers tuition, course materials, field-trip travel, and room and board. Contact: **Shannon O'Dunn, NSF Co-Director, Grossmont College, 8800 Grossmont College Drive, El Cajon, CA 92020.** Telephone: 619-465-1700, ext. 690; FAX: 619-461-3197.

COURSES AND TRAINING

DOCTOR OF ARTS IN BIOLOGICAL SCIENCES. FELLOWSHIPS are available for persons interested in the D.A. degree in biological sciences. The program stresses preparation for undergraduate teaching at colleges and universities. Applicants must hold a master's degree in some area of biology. Deadline for receipt of application is 1 March 1991. For more information, contact: **Chairman, D.A. Committee, Department of Biological Sciences, Idaho State University, Pocatello, ID 83209.** *An Equal Opportunity Employer.*

DOCTORAL PROGRAM IN MOLECULAR/CELLULAR BIOLOGY AND PATHOBIOLOGY
Interdisciplinary program seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$10,000 to \$15,000 available on a competitive basis. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

POSTDOCTORAL TRAINEESHIPS, CARDIOVASCULAR DISEASES. Postdoctoral traineeships for up to 3 years are available beginning July 1991 in epidemiology and prevention of cardiovascular diseases. Individual training plus opportunity to obtain a master's or doctoral degree in epidemiology. Research linked to clinical and laboratory research. Specific areas of interest include: pharmacological and nonpharmacological treatment of hyperlipidemia, etiology of atherosclerotic disease, genetics of lipoproteins, cardiovascular disease in women, minority health, diabetes and cardiovascular disease, fatty acid metabolism, and clinical trials analysis. Excellent research and field resources are available. *We encourage applications by minorities and women. Physician applicants must be eligible for licensure in the United States.* Send résumés to: **Dr. Lewis H. Kuller, M.D., Dr.P.H., University of Pittsburgh, Graduate School of Public Health, Department of Epidemiology, 130 DeSoto Street, Pittsburgh, PA 15261.** *The University of Pittsburgh is an Equal Opportunity/Affirmative Action Educational Institution.*

BASIC NEUROBIOLOGY TRAINING FOR NEUROLOGISTS AND NEUROSURGEONS

The Harvard Medical School offers research fellowships in cellular neurobiology for clinicians. Candidates must be enrolled in or have recently completed a neurology or neurosurgery residency. Training is offered in one of the laboratories of cellular or molecular neurobiology at the Harvard Medical School. The program offers 2 years of uninterrupted laboratory time, during which no clinical work is permitted. For more information, candidates should contact: **Jeanne Jackson, Neurosurgery Research, Wellman 429, Massachusetts General Hospital, Boston, MA 02114.** *The program is supported by an NIH National Research Service Award, and the rules governing such awards apply. Applications from women or members of under-represented minorities are invited.*

MEETINGS

UV-B WORKSHOP

Workshop to define measurements requirements and network design for UV-B monitoring, Denver, Colorado, 23 to 25 January 1991. The workshop will address questions relating to the measurement and monitoring of UV-B radiation, including the development of a plan for a national scale monitoring network. Focus will be on the following topics:

- Identification of the spectrometric measurements of UV-B flux required to meet the needs of the various user communities, both for intensive research efforts and long-term monitoring.
- Definition of the instrument characteristics and specifications, including calibration, necessary to meet the measurement requirements.
- Development of a strategic plan for research and national scale network monitoring programs to meet these needs.

The workshop is sponsored by the Cooperative State Research Service of the U.S. Department of Agriculture and directed by **J. H. Gibson, Natural Resource Ecology Laboratory, Colorado State University.** Contact: **Office of Conference Services, Colorado State University, Fort Collins, CO 80523,** telephone: 303-491-6222 or FAX: 303-491-0667, for further information.

SITUATIONS WANTED

BIOCHEMIST, Ph.D. (1985). Experience in purification of protein, enzyme, cell culture, cDNA cloning and sequencing, antinuclear antibodies. Seeking research/industrial position. **Box 134, SCIENCE.**

BIOCHEMIST, Ph.D. Strong industrial R&D background; prior teaching experience. Biotechnology, protein chemistry, bioseparations, and biomaterials. Seeks academic teaching/research/administrative position. **Box 136, SCIENCE.**

FLOW CYTOMETRIST. Experienced in immunofluorescence, cell cycle analysis, kinetics, and cell sorting. Available immediately. **2 Clifton Road, Clifton, NY 14428.**

MOLECULAR BIOLOGIST, Ph.D. (1983). Retrotransposon and retroviral gene engineering; teaching, inventions, pubs, 5-year NIH funding; Industry/Faculty; research/admin. **Box 64, SCIENCE.**

MOLECULAR BIOLOGIST, Ph.D. Six years as PI in eukaryotic gene regulation; experience with expression vectors, transgenic mice. Seeks industry position. **Box 143, SCIENCE.**

MOLECULAR CELL BIOLOGIST, Ph.D., second VA grant. Neuroendocrinology, developmental biology, gene regulation, and bone biology. Academic, industrial, or teaching position. **Box 145, SCIENCE.**

MOLECULAR AND CELLULAR BIOLOGIST, Ph.D. Ten years of research experience, publications, gene structure, gene expression, transcription factors. Seeking research/directorship position. **Box 144, SCIENCE.**

TOXICOLOGIST/ENVIRONMENTAL HEALTH SCIENTIST, Ph.D. Experience in management, research, and teaching in academia, government, and industry. Seeks challenging position. **Box 142, SCIENCE.**

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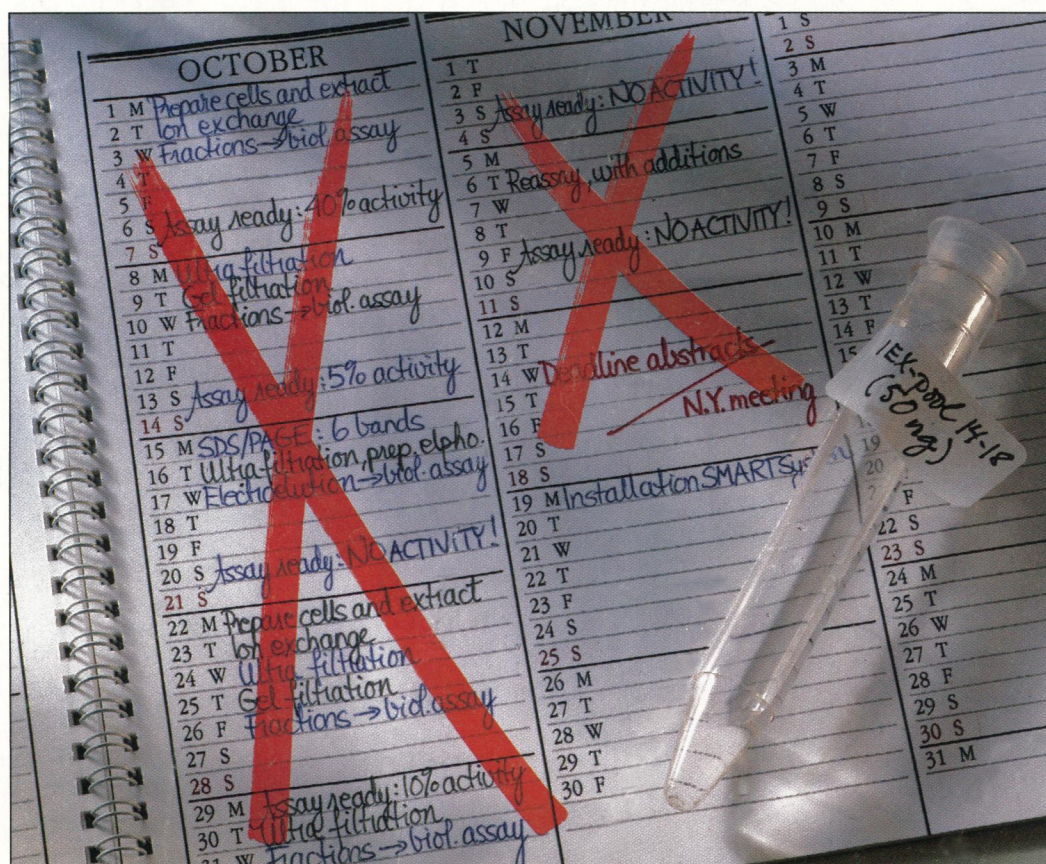
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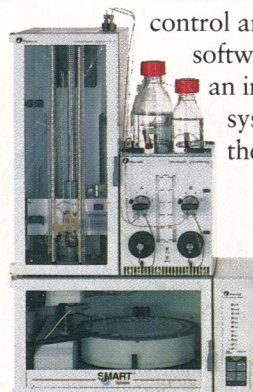
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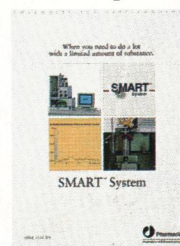
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