Temperature Microprobes

Accurate to 0.1°C
Flexible probes, .009” dia.
Needle probes, .013” dia. (29ga)
Response as fast as .005 seconds

These quality sensors with guaranteed accuracy can be used with any type “T” thermocouple readout. We also make larger probes for clinical and laboratory use and, if you have an unusual application, we can quote on custom sensors in any quantity. Call or write for free brochure on our probes and digital thermometers.

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IBI RECOMBINANT DNA WORKSHOP

Schedule for 1989

January 17-20
San Diego State University, San Diego, CA

February 21-24
Duke University, Durham, NC

March 7-10
Fairleigh Dickinson University, Teaneck, NJ

March 14-17
Wesleyan University, Middletown, CT

March 21-24
Boyce Campus, CCAC, Pittsburgh, PA

May 16-19
University of Hawai, Honolulu, HI

June 6-9
San Francisco State University, San Francisco, CA

July 18-21
San Diego State University, San Diego, CA

August 15-18
University of Wisconsin, Madison, WI

September 12-15
Cleveland State University, Cleveland, OH

Each participant will perform:

- restriction mapping
- DNA recovery from agarose gels
- preparation of competent cells
- colony screening
- plasmid purification
- agarose gel electrophoresis
- ligation of DNA fragments
- transformation
- blotting DNA from agarose gels

Tuition is $795 for four full days. Class size will be limited to 16.

IBI DNA SEQUENCING WORKSHOPS

The 1989 schedule of DNA Sequencing Workshops is in preparation. If your institution is able to provide space for a workshop, or if you wish to receive a copy of the schedule when it becomes available, please call (800) 243-2555.

For more information or registration, please call or write:
Lisa Salen or David F. Betsch, Ph.D.
IBI-A Kodak Company
P.O. Box 9558
New Haven, CT 06535
(800) 243-2555
(203) 786-5600

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Circle No. 139 on Readers’ Service Card
Explore New Directions in Chemical Research

Frontiers in the Chemical Sciences
Selected and with an introduction by
William Spindel and Robert M. Simon, National Research Council

This collection of 38 articles from the pages of Science shows chemists unraveling the mysteries of molecular reactivity, developing powerful analytical and theoretical tools, exploring and exploiting new pathways for catalysis and synthesis, and contributing to disciplines as diverse as biology and materials science. Focusing on such themes as fundamental chemical change and extreme molecular complexity, this volume takes the reader on a tour of the contemporary research frontiers in chemistry. Articles by some of the leading scientists in their respective fields cover new work in seven key areas: understanding chemical reactivity, chemical analysis, theoretical chemistry, chemical catalysis, organic synthesis, the chemistry of life processes, and the chemistry of new materials. Two Nobel lectures are included.

592 pp.; fully indexed and illustrated
Hardcover $29.95 ($23.95 for AAAS members)
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Order from: AAAS Marketing, Dept. C, 1333 H St., NW, Washington, DC 20005. Add $1.50 postage and handling per order. Allow 4-6 weeks for delivery.

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LINE CLASSIFIED ADVERTISING DEADLINES:
Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date). Deadline for display advertising, please contact Scharago Associates.

POSITIONS WANTED
40¢ per word, plus $4 for use of box number, per week. $10 minimum, per week. Prepayment required. This rate is available only to individuals seeking jobs.

LINE CLASSIFIED (POSTIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth) $40 per line, $200 minimum, per week (minimum charge covers one inch on a single column; one inch equals 120 characters and spaces per line). No charge for use of box number. No agency commission for ads less than 4 inches. No cash discount. Prepayment required for all foreign ads. Purchase orders must be accompanied by billing address required for all other advertising.

To ESTIMATE ad cost:
Structure ad copy on a separate page, on lines of 52 characters or less, separated by at least 1/4 inch. Each line of heading, and/or extra line spaces, and all partial lines (including centered only information) are counted as full lines. Ad titles located within the text are printed in double caps and are only 2 characters per line. In ESTIMATING the cost, multiply total lines x $4.00 = approximate cost of ad. (This is an approximate cost ONLY: Allow for variation between estimated lines and actual typeset line space. Purchase orders must allow for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY:
No cancellations accepted after Thursday, TWO weeks prior to issue date incur a 10% production charge. Final deadline for cancellations is 12 p.m. Tuesday, ONE week prior to issue date. Cancellations must be in writing.

Send copy for all Positions Wanted ads and Line Classified ads less than 1/6 page in size (30 lines) to: SCIENCE Classified Advertising, 1333 H Street, NW, Room 940, Washington, DC 20005 Phone: 202-328-6555

Send copy for Fractional Display ads, 1/6 page and larger, and all Marketplace ads to: Scharago Associates, Inc., 1918 Broadway, New York, NY 10003 Phone: 212-797-1200

Blind ad replies should be addressed as follows:
Box (give number) SCIENCE
1333 H Street, NW Washington, DC 20005

POSITIONS WANTED

Anatomist, Ph.D. Nine years of experience teaching gross anatomy, histology and neuroanatomy to medical students. Prior teaching at undergraduate level. Seeks teaching position at medical school or university. Box 196, SCIENCE.

Clinical Biochemist-Toxicologist, Ph.D., Biochemistry, 1974. Wants position as laboratory director or equivalent, preferably with existing cytological, immunocytochemical and/or electron microscopic laboratories. Will act as consultant to companies needing drug testing. Please send inquiries to Box 9, SCIENCE.

Immunologist, M.D. Established investigator. Academic and research background with particular emphasis on autoimmunity, immunogenetics. Extensive publication in autoimmune disease. Interested in developing specific therapeutic agents for autoimmune diseases. Seeking a science/scientific director position in industry. Box 5, SCIENCE.


Medical Computer Specialist, M.D. Board-certified with 15 years of primary care clinical experience in hospital-based practice. Seeks position with in-hospital computer systems that employ a personal computer workstation for each patient. Includes in-service computer training in computer-based health care and medical specialty areas. Seeks position with opportunity for medical research in the areas of computer science and/or medical specialty areas. Box 187, SCIENCE.

POSITIONS OPEN

ACADEMIC POSITION IN PATHOLOGY
Medical school, full-time, position to teach pathology to medical students. Will be involved in advanced courses to graduate students. M.D. or Ph.D. required. In a medical school setting is required. Teaching experience in pathology to medical students, past research or clinical experience is highly desirable. Rank and salary negotiable, depending on qualifications and experience. Starting date: 1 July 1989. Send curriculum vitae and three letters of recommendation to: Dr. Panayotis G. Iatridis, Northwest Center for Medical Education, Indiana University School of Medicine, 3400 Broadway, Gary, IN 46408. Indiana University is an Equal Opportunity/Affirmative Action Institution.

ANIMAL PHYSIOLOGIST: Assistant professor, tenure-track, beginning August 1989; teach two courses per semester with laboratories; animal physiology, comparative vertebrate anatomy, human anatomy, another course for majors or non-majors; supervise undergraduates; advise; Ph.D. required. Seton Hill College is a Catholic liberal arts college for women, 35 miles east of Pittsburgh. By 3 February 1989, send three letters of recommendation, a summary of teaching history and research goals, equipment needs, curriculum vitae, and transcripts to: Sister Berendette Pondy, Ph.D., Department of Biology, Seton Hill College, West PIttsburg, PA 15223. An Equal Opportunity/Affirmative Action Institution.

ASSISTANT PROFESSOR PATHOBIOLOGY—BROWN UNIVERSITY
The Department of Pathology and Laboratory Medicine at Brown University is seeking an experimental pathologist for a campus-based tenure-track position as assistant professor of medical science. The successful candidate is expected to participate in the ongoing research program supported by external funds, involving the study of basic mechanisms of disease pathogenesis. Teaching duties involve participation in courses of general or systemic pathology to medical students, and training and advising undergraduate and graduate students. Candidates should have an M.D., D.V.M. and/or Ph.D. degree, and a minimum of postdoctoral or residency research training in pathology. Preference will be given to candidates with an M.D. degree with a strong background in research experience, and further experience in molecular pathology. Opportunities for the practice of pathology on a part-time basis are available at the Brown University affiliated hospitals. Send curriculum vitae, recent research activities, a description of career objectives and research plans, and three letters of reference to: Dr. Nelson Fausto, Chair, Department of Pathology and Laboratory Medicine, Division of Biopathology and Medicine, Brown University, Providence, RI 02912. We encourage applications from women and minority candidates. Brown University is an Equal Opportunity/Affirmative Action Employer. Deadline: 15 March 1989.

ASSISTANT RESEARCH MOLECULAR BIOLOGIST
To join a program on transgenic mice with foreign protein (PrP) genes and study PrP transgenic mice. Requires a Ph.D. and molecular biology training. Experience in mouse genetics, recombinant plasmids, eukaryotic expression vectors, and site-directed mutagenesis are highly desirable. Salary dependent on experience. Send curriculum vitae and three letters of reference to: Dr. Mark C. Herzberg, Chairperson, Immunologist Search Committee, School of Dentistry, 17-164 Moore Tower, University of Minnesota, Minneapolis, MN 55455. Applications will be accepted until 3 February 1989. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

Dr. H. Bird Department of Chemistry and Biochemistry Concordia University 1455 de Maisonneuve Boulevard, West Concordia, Quebec H3G 1M8

ASSISTANT PROFESSOR IMMUNOLOGIST UNIVERSITY OF MINNESOTA SEARCH REOPENED
The School of Dentistry of the University of Minnesota invites applications for a tenure-track position. The successful candidate will be expected to develop a vigorous independent research program and interact with scientists in the Clinical Research Center for Periodontal Diseases, the Dental Research Institute, and other excellent programs in cellular and molecular immunology. Applicants with outstanding programs or promise in any area of modern immunology are encouraged to apply. Minimal qualifications include a Ph.D. and postdoctoral experience or a D.D.S. degree with 5 years of research experience. Candidates must be qualified to teach in graduate and professional school courses. Excellent laboratory and start-up funds are available. Applicants should submit curriculum vitae, statement of professional goals, and three letters of recommendation to: Dr. Mark C. Herzberg, Chairperson, Immunologist Search Committee, School of Dentistry, 17-164 Moore Tower, University of Minnesota, Minneapolis, MN 55455. Applications will be accepted until 3 February 1989. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

ASSISTANT PROFESSOR IN BIOCHEMISTRY The Department of Chemistry and Biochemistry at Concordia University, Montreal, has an opening for a tenure-track appointment at the rank of ASSISTANT PROFESSOR in BIOCHEMISTRY to commence in September 1989. The Department has strong research interests in the areas of biochemistry and chemistry in bioorganic and medicinal chemistry, as well as in non-invasive and non-ionizing biological imaging and mapping. We are seeking an outstanding candidate with research interests in areas of basic biochemistry, such as: enzymology, immunology, cell biology, membrane proteins, etc. Our department is housed adjacent to the Biology Department. Concordia University is a predominantly English Institution located in downtown Montreal close to three other research-intensive institutions. There are 50 graduate students enrolled at the M.Sc. and Ph.D. levels in the Department and about 15 of these are doing research in the area of biochemistry. We are interested in candidates that will attract external funding, and teach biochemistry effectively at the undergraduate and graduate levels. Start-up assistance will be available from the University, while external funding is available from Ciencia Funding from the Natural Sciences and Engineering Research Council of Canada. The current salary floor for assistant professors is $32,003 per year.

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CONCORDIA UNIVERSITY Concordia University 1455 de Maisonneuve Boulevard, West Concordia, Quebec H3G 1M8
The Department of Radiology at the University of Minnesota has available a full-time, probationary tenure-track Assistant Professor position beginning 15 March 1989. Minimum requirements include a Ph.D. in chemistry, physics, or biophysics; a minimum of 1 year of postdoctoral experience in the application of in vivo MR spectroscopy. Responsibilities will include research in the area of magnetic resonance imaging and in vivo spectroscopy, graduate and undergraduate medical instruction and advising. Research performance will be strongly encouraged and evaluated. Salary is negotiable and competitive, and is dependent on past scholarly publication and experience. Applications will be accepted through 1 March 1989. Applicants should submit a letter detailing their scientific background, curriculum vitae, and the names of two references to: Dr. William M. Thompson, Professor and Chairman, Department of Radiology, (Box 292 UMHC), University of Minnesota, 420 Delaware Street S.E., Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity and Affirmative Action Educator and Employer and specifically encourages applications from women and minorities.

DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION University of Minnesota at Little Rock (UALR)

Applications are invited for a tenure-track ASSISTANT PROFESSOR in the Department of Electronics and Instrumentation, College of Science and Engineering, University of Minnesota at Little Rock (UALR). The University of Minnesota at Little Rock is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

ASSISTANT PROFESSOR OF PHYSIOLOGY

A tenure-track position for an assistant professor is available in the Department of Physiology, Eastern Virginia Medical School. Applicants must possess outstanding credentials in their area of research, and show promise of obtaining appointed faculty status at the national level. Please send curriculum vitae and the names of three references to: Russell L. Prewitt, Ph.D., Chairman, Physiology Search Committee Department of Physiology Eastern Virginia Medical School P.O. Box 1980 Norfolk, Va 23501 Eastern Virginia Medical School is an Equal Opportunity/Affirmative Action Employer.

MOREHEAD STATE UNIVERSITY

Department of Biological and Environmental Sciences

ASSISTANT PROFESSORS OF BIOLOGY (Genetics, Ecology, Limnology, Immunology) A 1-year appointment, with probability of renewal for an additional 2 years, is available beginning August 1989. Candidates must have Ph.D. or equivalent degree in the discipline of the position. Applicants are invited for a 3-month tenure-track positions beginning August 1989 with a position available in each of the disciplines of genetics, ecology, limnology, and immunology. Responsibilities: Teach undergraduate and graduate level courses; advise students; participate in committee assignments; and provide regional service. Qualifications: Ph.D. from a recognized program; evidence of potential for successful teaching, research and service; scholarly productivity; ability to direct graduate and undergraduate research; and other communication skills. Submit letter of application, curriculum vitae and three letters of reference by 20 February 1989 to: Office of Personnel, Morehead State University, HM-101, Morehead, KY 40351. MSU is an Equal Employment Opportunity/Affirmative Action Employer and requires compliance with the Immigration Reform and Control Act of 1986.

ASSISTANT PROFESSOR—THEORETICAL PHYSICIST

The Department of Physics at the University of Oklahoma invites applications for a one-year, non-tenure-track position beginning in August 1989. Applicants should have a Ph.D. in Theoretical Physics in hand by the beginning of the academic year. A Ph.D. is required. Applicants should have a good background in quantum mechanics, statistical mechanics, and some background in classical mechanics, electromagnetism, and atomic and nuclear physics. They should be able to teach courses in classical mechanics, electromagnetism, and quantum mechanics. Applications should be sent to: Professor R. David Schaeffer, Chair, Department of Physics, University of Oklahoma, Norman, OK 73019. Equal Opportunity Employer.

ASSISTANT PROFESSOR OF PHYSICOTHERAPY

The University of Kentucky is seeking applicants to fill a tenure-track appointment beginning August 1989. The successful candidate will be expected to have a Ph.D. in kinesiology or related discipline and to develop an independent research program. The successful candidate will also be expected to participate in teaching an upper level course in sport performance enhancement. Applications should be submitted by 15 February 1989 to: Dr. Robert W. Smith, Chair, Department of Physical Therapy, University of Kentucky, Lexington, KY 40506. Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR OF HEALTH SCIENCE

The University of Kentucky College of Health Sciences invites applications for a tenure-track position beginning in August 1989. Successful candidates will be expected to develop a research program, to participate actively in graduate and undergraduate teaching, and to perform university and community service. Applications should be sent by 15 February 1989 to: Dr. R. Wayne Edwards, Chair, Department of Health Science, University of Kentucky, Lexington, KY 40506. Equal Opportunity Employer.
CHEMIST

Athena Neurosciences, currently involved in the synthesis of novel compounds for various neurological diseases, has a position open for an Organic Chemist. The optimal candidate would have a Ph.D. in chemistry or medicinal chemistry or have a BS/MS with significant experience. Position requires extensive training in organic synthesis, preferably in the synthesis of drug molecules. Hands-on experience with NMR, GC/MS and HPLC is also desired. The individual will be an integral member of the drug delivery team which includes pharmacologists, synthetic chemists, analytical chemists and clinicians.

Athena, backed by the most prominent venture capital investors in the biotechnology industry, offers an innovative and exciting scientific environment, competitive salaries and benefits, and equity participation. Please send CV to: Athena Neurosciences, Ad #3658, 800F Gateway Blvd., South San Francisco, CA 94080. EOE:

athena neurosciences

DIRECTOR

Fermi National Accelerator Laboratory

The Fermilab Board of Overseers of Universities Research Association, Inc. (URA) has initiated a search for a new Director of the Fermi National Accelerator Laboratory. The position will be available July 1, 1989. The Search Committee is now in the process of assembling a list of suitable candidates and welcomes applications and nominations from the community of high energy physicists. Communications and resumes, which must be received by February 15, 1989, should be sent to:

Dr. Harold K. Ticho, Chairman
Search Committee
Universities Research Association, Inc.
Suite 400
1111 19th Street, N.W.
Washington, D.C. 20036

URA is an affirmative action/equal opportunity employer.

POSTDOCTORAL RESEARCH ASSOCIATE
HST OBSERVATIONS AND DATA ANALYSIS

The Laboratory for Atmospheric and Space Physics of the University of Colorado invites applications for the position of Research Associate. We anticipate an opening beginning in the fall of 1989 for participation in observations and data analysis for the Hubble Space Telescope (HST). The undersigned is the Principal Investigator for the Goddard High Resolution Spectrograph (GHRS) and the activities deal with the ultraviolet spectroscopy of comets and GHRS Team Projects covering a wide range of astrophysics.

LASP facilities include the data analysis and operations control center for the Solar Mesosphere Explorer mission; a development node of the Planetary Data System; a complete space instrument design, fabrication, test and calibration facility; and modern computer facilities. In addition, there is an ongoing sounding rocket program, and payloads for shuttle-launched missions are being developed. The Laboratory is an Institute of the University's Graduate School and has close ties with the Departments of Astrophysical, Planetary and Atmospheric Sciences and of Aerospace Engineering Sciences.

A doctorate in an appropriate discipline is required; salary will be in accord with experience. Send letters of application with an up-to-date resume and the names of two references to:

Dr. John C. Brandt, PI-GHRS
LASP/University of Colorado
Campus Box 392
Boulder, CO 80309-0392

Applications will be accepted until February 1, 1989. The University of Colorado has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities and disabled individuals.
ASSOCIATE DIRECTOR CURATORIAL

The Royal Ontario Museum is seeking applications for the position of Associate Director Curatorial (ADC). The ADC is responsible for the management, administration and financial control of the curatorial activities and related services at the Museum. Reporting to the ADC are nineteen curatorial departments responsible for Life Sciences, Life Sciences and various Art and Archaeology subject areas, as well as a curatorial services department (Collections Management, Registration, Conservation and Photography). The ADC is responsible for approximately 195 staff and a total budget of slightly over $9 million.

The primary responsibility of the position is to provide leadership for curatorial excellence within the Museum which will ensure: the preservation, conservation and integrity of presentation to the public of the museum's collections; the quality of collections-related research; and structured curatorial input into the program of gallery development, temporary exhibitions, and other public programs.

The successful candidate will hold a Ph.D. degree in a Life Science field and will have demonstrated high scholarly achievement in one of the academic subject areas covered by the Museum. The successful candidate will have demonstrated superior managerial, communication and problem-solving skills obtained through progressively more responsible positions.

The ADC reports to the Director and normal- ly is Acting Director in the absence of the Director. The position requires considerable inde- pendent action within the ADC’s area of responsibility, as well as close liaison and participation with other senior staff and departments in order to ensure the success of the museum's many objectives. The ADC has frequent contact with museum trustees, curators, conservators, and others, as well as various government agencies.

The position is a term appointment for 5 years made by the Board of Trustees on the recommend- ation of the Director, and renewable by mutual consent.

Salary range: comparable to similar levels of responsibility in the Ontario Civil Service.

Applications should be sent to: T. Cuyler Young, Jr., Director, Royal Ontario Museum, 100 Queen’s Park, Toronto, Ontario, Can- ada M5S 2C6, no later than 20 February 1989.

This advertisement is directed primarily to Canadian citizens and landed immigrants, but others are invited to apply.

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LEAD SCIENTIST
Atherosclerosis Research

For more than a century, scientists at ELI LILLY AND COMPANY have developed innovative, high quality pharmaceutical products. In 1988, Lilly invested over $500 million in research-and-development programs. More than 3,000 scientists at the company's Lilly Research Laboratories are pursuing creative research programs that involve many important health care needs.

To further build its research capabilities, Lilly is seeking an accomplished scientist to lead an atherosclerosis program. This individual will establish a preclinical group of Senior Scientists whose mission will be exploratory research and discovery of drugs to treat atherosclerosis and related vascular disorders, and should have the following qualifications:

- Self-motivation, vision, and the ability to conceptualize, focus, and organize a basic research and drug-discovery program with particular emphasis on biology of the vascular wall.
- Either Ph.D. or M.D. degree, with a minimum of seven years academic or industrial experience, and an indepth understanding of the mechanisms underlying the atherosclerotic process.
- An established research record in the area of atherosclerosis and a national scientific reputation.

In addition, this scientist must have the leadership capabilities needed—analytical, communication, interpersonal, and organizational skills—to build a research program. The successful candidate will have an opportunity to recruit Senior Scientists in the process of building the program.

Eli Lilly and Company is committed to scientific excellence. Lilly provides a stimulating professional atmosphere with many opportunities for collaborative, multidisciplinary research. The company offers an attractive total compensation program. Entry level and salary will be based upon the candidate's experience.

For prompt consideration, please forward your curriculum vitae to:

John W. Crooks, Manager
Ph.D. Recruitment (ASR) 2
Eli Lilly and Company
Lilly Corporate Center
Indianapolis, Indiana 46285
POSITIONS OPEN

CENTER FOR BIOTECHNOLOGY UNIVERSITY OF NEBRASKA-CORNELL (UNL)

State funding for new research initiatives is enhancing biotechnology at UNL. Increasing the number of BIOTECHNOLOGY FACUL-
TY positions is a major goal. We invite applications for the following positions:

- **Molecular plant physiology**, especially in the areas of plant development and the chemical analysis of plant stress responses, photobiology, photosynthesis, hormone action, or nutrient util-
ization. Chair: Dr. Paul Staswick, 402-472-5626.
- **Plant vector/plant transformation system**, especially in areas of fundamental or applied biological problems, such as plant Agrobacterium interactions, mechanisms of DNA insertion, or gene regulation. Chair: Dr. Martin Dickman, 402-472-5494.
- **Chromosome molecular-structure/function**, especially in the areas of molecular biophysics (e.g. NMR or cryo-electron microscopy), examination of chromosome molecular structure, or gene regulation, but not limited to the above. Chair: Dr. Daniel Rock, 402-472-3854.
- **Animal virology**, especially in the areas of gene regulation and expression, viral replication, or contributions to viral pathogenesis and immunity. Chair: Dr. Daniel Rock, 402-472-3854.

Substantial start-up funds and technical support are available. Must have demonstrable research potential through postdoctoral experience and recent publications, and are expected to develop a vigorous research program through extramural funding. All appointments are primarily for research; teaching is expected principally in Plant Pathology, Plant Biology, or Plant Molecular Biology. Positions are available for assistant professor, or in exceptional cases, higher ranks.

Participating Departments/Units in the current searches are: The Departments of Agronomy; Animal Science; Biochemistry; Chemistry; Plant Pathology; Veterinary Science and the School of Biological Science.

Application deadline is 15 February 1989, or until suitable candidates are identified. Submit a letter of interest, curriculum vitae, synopsis of a proposed research program and arrange for at least three reference letters to the appropriate chair. Send to Center for Biotechnology, 3202 ANS, UNL, Lincoln, NE 68583-0945. For electronic mail, FAX (402) 472-2853. Applications are encouraged on an Equal Opportunity/ Affirmative Action Employer.

Middlebury College: Applications are solicited for a 2-

year leave replacement for a CHEMIST capable of teaching organic and inorganic chemistry at the under-

graduate level. Teaching effectiveness at the undergradu-

ate level and potential to involve undergraduates in research are most important considerations. Ph.D. or A.B.D. required. Send letter describing background and research interests, an up-to-date curriculum vitae, undergraduate and graduate transcripts, and three current letters of reference to: R. W. Glesmann, Chairman, Department of Chemistry and Biochemistry, Middle-

bury College, Middlebury, VT 05753. Application deadline is 17 February 1989. Middlebury College is an Equal Opportunity Employer.

ECOLOGIST—Tenure-track position, ecosystems focus, available fall 1989. The successful applicant will develop new research initiatives in funded ecosystems research, and teach undergraduate, M.S., and Ph.D. students. Appointment expected at assistant professor level, but exceptions are considered for more experienced candidates. Applications should be sent to: Center for Ecosystem Studies, 3202 ANS, UNL, Lincoln, NE 68583. For electronic mail, FAX (402) 472-2853. Applications are encouraged on an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF STOMATOLOGY UNIVERSITY OF CALIFORNIA, SAN FRANCISCO SCHOOL OF DENTISTRY

Full-time position as Chairperson of the Department of Stomatology includes programs in oral biology, oral medicine, oral pathology, periodontal medicine, and oral radiology. Responsibilities include providing academic and administrative leadership in research, teaching, patient care, and academic university service for undergraduate, predoctoral and postdoctoral students, and faculty. Demonstrated administrative experience and academic qualifications (e.g. Ph.D., or equivalent degree) for a senior professional rank are required. Salary commensurate with qualifications and experience.

Applications are invited. No application form is required. The University of California, San Francisco is an Equal Opportunity, Affirmative Action Employer.

Please send curriculum vitae and the names of three individuals familiar with your work to: Dr. Leonard B. Kaban, Chair, Search Committee, In care of: Office of the Dean, School of Dentistry, Box 0430, UCSF, San Francisco, CA 94143. Applications must be submitted by 28 February 1989.

CYTOTGENETIST, MASSACHUSETTS GENERAL HOSPITAL

We invite applications for a staff position in cytogenet-
ics. Applicants should have a Ph.D. or M.D. degree, experience in cytogenetics (preferably with certification in clinical cytogenetics), a strong background in mole-
cular biology, and teaching experience. Applications from men and women are particularly encouraged.

Applications are invited. No application form is required. The Massachusetts General Hospital and Harvard Medical School are Affirmative Action/Equal Opportunity Employers.

DIRECTOR PLANT CELL CULTURE AND TRANSFORMATION FACILITY CORNELL PLANT SCIENCE CENTER

Facility Director (Senior Research Associate, Ph.D.) to administer a central facility which has the following mission: (i) training of scientists in techniques of plant tissue culture and gene introduction and (ii) provision of state-of-the-art equipment to produce trans-
genics. The successful candidate will manage and direct these efforts, and should be expected to collaborate with other research groups in the center. Salary is available to commensurate with experience.

Applications are invited. No application form is required. Applications must be submitted by 20 February 1989.

ECOLOGIST—Faculties of biology and environ-

mental science, Antioch College. Duties include teaching ecology, either vertebrate or invertebrate zoology, gener-

al biology, and associated courses appropriate to candi-
date’s background and interests. Broad professional de-
velopment is encouraged. Minorities and women are urged to apply. This is a ten-year appointment. The Search Committee encourages applications from women and members of minority groups. Salary is negotiable.

Send curriculum vitae, three letters of reference, and a statement of interest and plans to: Dr. J. R. Rey Search and Screen Committee Florida Medical Entomology Laboratory 200 North Street S.E. Vero Beach, FL 32962

by 1 May 1989. The University of Florida is an Equal Opportunity Employer.

ENTOMOLOGY SCIENTIFIC ASSISTANT

The Department of Entomology of the American Muse-
um of Natural History invites applications from indi-

dividuals interested in assisting curators with our dis-

patched collections. Responsibilities include collection management, preparation and cataloguing of collections, preparation of dissections, mounting, labeling, loan preparation, library research and assisting curators with their research projects.

Applicants must have a baccalaureate degree in entomology, or a related degree in the biological sciences with studies or work-related experience in ento-

mology and some collection-related experience and illus-

tration skills preferred; interest and knowledge of Diptera helpful as is the ability to do detailed and meticulous work. Knowledge of data processing required.

Salary: $20,811 per annum. Excellent benefits. For consideration, submit résumés to: Mr. Lee Vilensky, Personnel Department (S), American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024. An Equal Opportunity Employer.

ENVIRONMENTAL RESEARCH ENGINEER AT A LARGE RESEARCH UNIVERSITY

Requirements: B.S. (civil engineering), M.S. (environ-

mental engineering) or equivalent. Experience in three years of research in biological industrial wastewater treatment; 1 year in area of laboratory-scale applications of activated sludge and rotating biological contactor processes to the treat-

ment of paint stripping wastewater. Experience may be gained simultaneously and during academic studies. Du-

ties: Design, planning and implementation of projects on field-scale biological treatment of U.S. Navy aircraft paint stripping wastewaters, data analysis/interpretation, and report writing. Salary of $31,000 per year for a basic work week of 40 hours. Send résumé to: Job Order 

#091075, Oklahoma State Employment Service Office, 3740 Spring Lake Drive, Oklahoma City, OK 73111 (5151).

EXTENSION ENTOMOLOGY (ASSISTANT/ASSOCIATE PROFESSOR). A tenure-track, 12-

month appointment, 80% extension and 20% research, at the Florida Medical Entomology Laboratory of the University of Florida. The successful candidate will serve as liaison to the Mosquito Control Agencies of the State of Florida. Applicants must have a Ph.D. in a biological science, postdoctoral experience in mosquito biology and control, and demonstrate communication skills.

Send curriculum vitae, three letters of reference, and a statement of interest and plans to: Dr. J. R. Rey Search and Screen Committee Florida Medical Entomology Laboratory 200 North Street S.E. Vero Beach, FL 32962

by 1 March 1989. The University of Florida is an Equal Opportunity Employer.

FACULTY POSITION IN EXPERIMENTAL ONCOLOGY CORNELL UNIVERSITY COLLEGE OF VETERINARY MEDICINE

Cornell University invites applications for a tenure-

track faculty position in its Cancer Cell Biology Labora-
tories. Candidates will have a Ph.D. (and/or D.V.M. M.D.) degree and at least 2 years of postdoctoral experi-
ence. Hostile will be expected to develop an active research program in basic (or applied) cancer research that complements existing programs in organ preference of metastasis, cell-cell and cell-substrate interaction, signaling transduction, differentiation, oncogene expression and viral transformation, etc.; and will also participate in the teaching of graduate students. The position will begin on 1 August 1989. Applications will be accepted through 31 May 1989 and should contain curriculum vitae, a letter outlining the research program, and three letters of reference. They should be sent to: Dr. Ronald G. Macdougall, Chairman Oncology Search Committee, Department of Pathol-

ogy, Cornell University College of Veterinary Medi-


SCIENCE, VOL. 243
Marine Biological Laboratory

MOLECULAR PROBES IN MARINE ECOLOGY: CONCEPTS, TECHNIQUES AND APPLICATIONS

June 18 - July 29, 1989

This is an intensive course for graduate students and postdoctoral fellows and established investigators who wish to learn the techniques of molecular biology and their application to physiological and ecological investigations. Lectures and discussions will accompany the laboratories and will focus on the technologies being learned and applications to specific problems in marine ecology. In addition, a MINI SYMPOSIUM ON GLOBAL ECOLOGICAL ISSUES is planned in conjunction with this course.

There will be two technique modules and one optional independent project module:

Module 1 -Nucleic Acid Probes
Objective: To gain theoretical and practical experience and competence in a variety of techniques using fish and other marine organisms as experimental material.

Module 2 - Immunochemical Probes, Molecular Biology and Microphysiological Techniques
Objective: Building on the techniques in Module 1 students will learn the procedures and limitations of immunological methods for the detection of specific proteins (enzymes) and also for detection of specific cells and cell types as well as newer microtechniques for measurement of pH and O2.

Module 3 - Independent Projects in Molecular Marine Ecology
An optional third three-week module will be comprised of independent research-oriented projects utilizing the techniques learned in modules 1 and 2. Possible topics include: recruitment, environmental adaptation and physiological ecology, and food chain studies.

Director: J. W. Hastings, Harvard University

Faculty: D. A. Powers, Stanford University; H. W. Piel, University of North Carolina; T. T. Chen, University of Maryland; S. Giavannoni, Oregon State University; B. Ward, University of California, Santa Cruz; R. G. Rowan, Center for Marine Biotechnology (University of Maryland and Johns Hopkins University). Limited to 24 students. Application Deadline: March 1, 1989.

For further information contact: Admissions Coordinator, Office of Sponsored Programs, Marine Biological Laboratory, Woods Hole, Massachusetts 02543.

Telephone: (508) 548-7765, Ext. 216

POSITION ANNOUNCEMENT

DIRECTOR

INSTITUTE ON GLOBAL CONFLICT AND COOPERATION

UNIVERSITY OF CALIFORNIA

The University of California invites applications and nominations for the position of Director of the Institute on Global Conflict and Cooperation (IGCC), a University of California multicampus research unit funded by the Regents of the University of California, the State of California, and private foundations. The mission of the Institute is to enhance the capability of the University of California to contribute to international security and cooperation through research, education, and special projects. Through a variety of programs—research grants, graduate fellowships, summer seminars, lectureships, conferences, and publications—the Institute seeks to discover ways to prevent or reduce conflicts that may lead to escalation into large scale conventional or nuclear war and to promote forms of international cooperation which promise to solve problems threatening world peace.

Candidates must be qualified for appointment as a senior faculty member of the University of California and be prepared to assume the directorship at the San Diego campus of the University, the current location of the Institute. The director of the Institute reports to the President of the University of California. He or she provides leadership and visibility to the Institute, in addition to being responsible for its array of regular activities as a multicampus research unit of the University of California. These activities include soliciting research proposals, creating task forces, colloquia and study groups, conducting conferences and seminars, securing extramural research support, promoting educational and public service programs, and coordinating intercampus projects. The director will be assisted in these activities by a steering committee and staff. Teaching responsibilities and departmental affiliation are subject to negotiation.

Qualified women and minority candidates are urged to apply.

Please send nominations or applications, including cv's and the names of four references, to:

IGCC Search Committee
Professor Randolph Silsver, Chair
355 University Hall
Office of the President
University of California
Berkeley, CA 94720

Candidates who send their complete applications by February 17, 1989 will receive full consideration. The position will remain open until final decisions are made by the Search Committee.

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

BIOMEDICAL RESEARCH AND DEVELOPMENT

ICI Pharmaceuticals Group, which includes Stuart Pharmaceuticals and ICI Pharma, is one of the fastest-growing producers of quality pharmaceuticals in the U.S. Expansion of our research programs has created challenging openings in our state-of-the-art laboratories in Wilmington, DE:

CNS Pharmacology

ELECTROPHYSIOLOGIST: Ph.D. in Pharmacology or Physiology in the area of electrophysiology and pharmacology of ionic channels. Experience and skills should include proficiency in the use of the patch-clamp technique for whole cell recording and for single-channel recording. Working experience with primary cell culture is highly desirable. Successful candidate will be part of a newly created Molecular and Cellular Pharmacology Unit intended to explore receptor and channel mediated cellular function.

PHARMACOLOGISTS: BS/MS in Biology or Biochemistry with experience in neurobiology or cell biology to work on receptor binding techniques, catecholamine metabolism or second messenger assays. Experience with tissue culture, HPLC analysis is desirable.

Pulmonary Pharmacology

BIOCHEMICAL PHARMACOLOGIST: BS/MS in Biological Sciences with strong biochemical background to work on the characterization of synthesis and action of lipid hormones (i.e. prostaglandins, leukotrienes and platelet activating factor). In lung. Experience with separation techniques and RIAs is desirable.

PHARMACOLOGIST: BS/MS in relevant discipline with training/experience in biology/pharmacology to conduct in vivo studies measuring pulmonary mechanics. Additional assignments will include in vivo measurements of gastrointestinal motility.

General Pharmacology

SENIOR PHARMACOLOGIST: PhD position for Postdoctoral Fellow or Senior Member with degree in smooth muscle and/or autonomic pharmacology, experience in in vivo and/or in vitro techniques, and communication skills. Knowledge in receptor theory desirable.

PHARMACOLOGIST: BS/MS in biological sciences or related discipline for work involving in vitro tests using isolated tissues for characterization of pharmacological activity of compounds. Familiarity with receptor function and electrolyte transport and membrane pharmacology/physiology is preferred.

Medicinal Chemistry

MEDICINAL CHEMISTS: BS/MS in Organic Chemistry with a strong background in organic synthesis including the ability to conduct multi-step synthetic sequences, chromatographic purifications and spectral interpretations. Positions involve the synthesis, isolation and characterization of novel organic compounds as candidates for drug discovery and development.

We offer an excellent salary and benefits program, including tuition aid for approved graduate study, and opportunities for professional growth.

Please send your resume with salary requirement, indicating the position for which you are applying, to:

Mary S. Carroll
ICI Pharmaceuticals Group
Wilmington, DE 19897

An Equal Opportunity Employer M/F.
POSITIONS OPEN

FACULTY—Department of Psychology at Illinois Wesleyan University seeks to fill an open rank tenure-track Ph.D. position for fall 1989. The position is in neuroscience, psychobiology, and typical courses will include a survey of neuroscience and a physiological psychology laboratory. Selection begins 1 March 1989. Send letter, curriculum vitae, and three letters of reference to: Dr. Clavadetscher, Psychology, Illinois Wesleyan University, Bloomington, IL 61702. Women and minorities are encouraged to apply. An Equal Opportunity Employer.

FACULTY MEMBER
MOLECULAR PATHOGENESIS
CASE WESTERN RESERVE UNIVERSITY

The Division of Infectious Diseases of the Department of Medicine at Case Western Reserve University Hospitals of Cleveland is seeking a Ph.D.-scientist trained in bacterial genetics or molecular pathogenesis for a tenure-track position at the level of assistant professor. This person will join a multidisciplinary research group focusing on host-parasite interactions in mycobacterial infections and would be expected to develop an independent as well as collaborative research projects on mycobacterial constituents associated with virulence and protective immunity. Send curriculum vitae and list of four references to:

Dr. J. J. Ellner
Department of Medicine
University Hospitals of Cleveland
2074 Abington Road
Cleveland, OH 44106

CWRU is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN BIOCHEMICAL SCIENCES

Applications are invited from scientists with at least 2 years of postdoctoral experience for a tenure-track position in the Division of Biochemical Sciences, Department of Chemistry, Lehigh University. Rank is at the assistant professor level although appointment at the associate professor level is possible with outstanding accomplishments. The successful applicant is expected to participate in teaching undergraduate and graduate courses and to establish a strong, independent externally-funded research program. Teaching is open but special consideration will be given to those involved in immunochromatography, lipid/membrane chemistry and areas which overlap and complement existing programs within the department. Applicants should send curriculum vitae, list of publications, brief description of research objectives and list of three references to: Dr. J. A. Alhadeff, Biochemistry Search Committee, Department of Chemistry, Lehigh University, Building A, MTC, Bethlehem, PA 18015. Applications received after 1 March 1989 cannot be guaranteed consideration. Lehigh University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN GEOGRAPHIC INFORMATION SYSTEMS

The School of Forestry and Environmental Studies at Yale University invites applications for a faculty appointment, at the assistant professor level, in geographic information systems. Applicants should have completed their doctorate by the date of appointment in a relevant field such as forestry, geography, remote sensing, landscape architecture, ecology, or computer science. Teaching responsibilities will include a comprehensive, masters-level course in GIS for natural resource management, and one or more advanced courses. Research interests in applications or development of GIS for interdisciplinary natural resource management are preferred. Opportunities for collaboration with computer science at Yale University are excellent. To apply, send a letter stating teaching and research goals, curriculum vitae and transcripts, the names, addresses, and telephone numbers of three references, and examples of recent work to: Professor William H. Smith, Soils Search Committee, Yale University, School of Forestry and Environmental Studies, 777 Prospect Street, New Haven, CT 06511; telephone: 203-432-5149. A complete application packet should arrive no later than 1 March 1989. The position is available 1 July 1989 and is for an initial term of 3 years.

Yale University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN MICROBIOLOGY

UNIVERSITY OF ALASKA FAIRBANKS

The Department of Biology and Wildlife and the Institute of Arctic Biology at the University of Alaska Fairbanks invite applications for an assistant professor level faculty position. The position is available 1 July 1989. The individual will teach at the graduate level, participate in research, and advise graduate students. More information will be provided on request. Send curriculum vitae, statement of teaching and research experience, and names and addresses of two or more references to: Dr. S. F. MacLean, Chair, Microbiology Search Committee, Department of Biology and Wildlife, University of Alaska Fairbanks, AK 99775-0280. Closing date for this position is 15 February 1989.

FACULTY POSITION IN QUaternary SCIENCES

Applications are invited for a new tenure-track academic-year assistant or associate professor level faculty position at the Institute for Quaternary Studies at the University of Kentucky. The successful candidate will complement established groups in archaeology, paleoecology, glaciology, and glacial geology. Examples: zooarchaeology, geomorphology, palaeoclimatology, stable carbon isotopes, geochemistry, and vertebrate paleontology. Preference will be given to candidates with a strong research and teaching record. He or she will be expected to extramurally support and to develop a research program. Although the primary emphasis is on research, the position will have an undergraduate and graduate teaching component. The successful candidate will have a joint appointment with the Institute and an appropriate academic department. Application deadline is 1 March 1989.

Send curriculum vitae, résumé, and three references to: Search Committee, Institute for Quaternary Studies, 304 Boardman Hall, University of Maine, Orono, ME 04469. Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN SOIL SCIENCE

The School of Forestry and Environmental Studies at Yale University invites applications for a faculty appointment, at the assistant professor level, in soil science. Applicants should have completed their doctorate by the date of appointment in a relevant field such as soil science, forestry, or biology. Teaching responsibilities will include a comprehensive, masters-level course in soil science for natural resource management, and one or more advanced courses. Research interests in forest soils or soils of other natural communities are especially appropriate. Specific areas of interest include soil physical, chemical, and biological aspects of soil science. To apply, send a letter stating teaching and research goals, curriculum vitae and transcripts, the names, addresses, and telephone numbers of three references, and examples of recent work to: Professor William H. Smith, Soils Search Committee, Yale University, School of Forestry and Environmental Studies, 777 Prospect Street, New Haven, CT 06511; telephone: 203-432-5149. A complete application packet should arrive no later than 1 March 1989. The position is available 1 July 1989 and is for an initial term of 3 years.

Yale University is an Equal Opportunity/Affirmative Action Employer.

FLOW CYTOMETRY TECHNOLOGIST

Beth Israel Hospital Boston seeks an individual experienced in operation of fluorescent-activated cell analyzer and cell sorter instruments (FACS) with M.S. or B.S. and equivalent experience to collaborate with research investigators and assist with acquisition and usage of cell sorting equipment in research applications of the instrument. Will administer to the facility by assuming full responsibility for its maintenance and operation, and overseeing and coordinating its daily operation. For the above position, please send resume to: Don elegance, Human Resources, Beth Israel Hospital Boston, 330 Brookline Avenue, Boston, MA 02215, Equal Opportunity Employer.

HEAD OF THE Horticulture, Forestry, Landscape and Parks Department, South Dakota State University, Ph.D. or equivalent in one of the above fields, plus 3 years experience in related research in the Department or in a closely allied field is required. Submit curriculum vitae, statement of research interest, three references and a letter of interest to: Dr. Charles McMillen, Department of Biology, South Dakota State University, Brookings, SD 57007. Telephone: 605-245-4344. The position was advertised in the American Journal of Botany and is available upon filling. The position will be filled by 20 September 1989 or position is filled. South Dakota State University is an Affirmative Action/Equal Opportunity Employer (male/female). Women and minorities are encouraged to apply. immigrateligibility required.
NATIONAL SCIENCE FOUNDATION

NSF’s Divisions of Cellular and Molecular Biosciences are seeking qualified applicants for Associate Director and Program Director positions under the provisions of NSF’s Rotator Program. Since responsibilities include research proposal evaluation, budget development and specific research accomplishment are key qualifications. The positions are excepted from the competitive civil service and are filled on a one- or two-year rotational/temporary basis. The positions become available periodically and will be filled beginning in the summer or fall, 1989.

The salary ranges and qualifications are as follows:

Associate Program Director—$41,121-$64,778; Ph.D. or equivalent experience plus 4 or more years of research experience beyond the Ph.D.

Program Director—$48,592-$75,473; Ph.D. or equivalent experience plus 6 or more years of research experience beyond the Ph.D.

In Cellular Biosciences, there are openings in: (1) Cell Biology; (2) Developmental Biology; (3) Cellular Biochemistry; and (4) Physiological Processes. In Molecular Biosciences, there are openings in: (1) Genetic; and (2) Biochemistry.

Applicants should send resumes or SF-171, Application for Federal Employment, to: National Science Foundation, Personnel Administration Branch, Room 208, 1800 G. St. NW., Washington, DC 20550, Attn: Catherine Handle. For further information call Dr. Bruce Umberger, Cellular Biosciences (202) 357-7305 or Dr. James H. Brown, Molecular Biosciences (202) 357-9400. Hearing impaired individuals should call (202) 357-7492.

NSF is an Equal Opportunity Employer.
FOREST BIOLOGIST. Warren Wilson College, a liberal arts college in the Appalachian Mountains, seeks to fill a permanent position in forest biology. Other responsibilities include teaching conservation, plant taxonomy, general biology, and supervision of students in the management of 660 acres of college forest. Research with undergraduates is encouraged. Ph.D. required. Send curriculum vitae and application letter to: V. Collins, Warren Wilson College, Swannanoa, NC 28778 by 28 February 1989. Equal Opportunity Employer.

The Division of Research Immunology and Bone Marrow Transplantation of the Children’s Hospital of Los Angeles wishes to recruit individuals for a JUNIOR FACULTY POSITION. The successful candidate will be expected to establish an independent research program with external funding and to engage in the clinical bone marrow transplantation program of the Division. Previous clinical experience in the areas of hematology/oncology, immunology and/or infectious disease is required. Research expertise in the area of oncology, molecular biology and/or immunology is preferred. Candidates should send their curriculum vitae, names of three references and a brief description of their research interests to:

Robertson Parkman, M.D.
Head, Division of Research Immunology and Bone Marrow Transplantation
Children’s Hospital of Los Angeles
4660 Sunset Boulevard
Los Angeles, CA 90027

The Children’s Hospital of Los Angeles and the University of Southern California, School of Medicine are Equal Opportunity Employers.


LECTURER—VERTEBRATE AND FIELD BIOLOGY

The Program in Ecology, Evolution, and Behavior of the Department of Biology at Princeton University has a full-time opening or two half-time openings at the rank of lecturer for a 1-year renewable appointment beginning in September 1989. Duties include teaching a vertebrate biology laboratory course with a strong physiological component, teaching field biology course, and advising the independent work of several undergraduates in these fields. The courses are given during the fall term, in collaboration respectively with Robert Link and Henry Horn, and there is time in the spring term for the candidate's own research. A Ph.D. in a relevant discipline is required. Applicants should specify whether they wish a half-time or full-time appointment. The closing date for applications is 3 March 1989. Applicants should send curriculum vitae and arrange for three letters of reference to be sent to: Robert Link, Search Committee, Program in Ecology, Evolution, and Behavior, Goody Hall, Princeton University, Princeton, NJ 08544-1003.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

MEDICAL MARKETING RESEARCHERS—Creative natural sciences or psychology Ph.D./V.M.S.'s needed for entry-level positions in health care marketing research/consulting (starting salary high 20's to low 30's). Positions require analytical/problem-solving ability, comfort in leading group discussions with M.D.'s, excellent writing skills (beyond journal articles) and some statistics. Our firm offers an interesting alternative to an academic career, utilizing your research skills in a creative and financially rewarding way. Send resume and letter explaining why you are applying (no phone calls) to: J. A. Cohen, Ph.D., Research Group Manager, National Analysts, Division of Booz, Allen and Hamilton, Inc., 400 Market Street, Philadelphia, PA 19106. An Affirmative Action Employer.

Yale UNIVERSITY

Vertebrate Developmental Biologist

Yale University Department of Biology wishes to appoint a Vertebrate Developmental Biologist at the Assistant Professorship level. The successful candidate should carry on a vigorous, independent research program, supervise the research of graduate students and postdoctoral fellows, and contribute to undergraduate teaching.

Send curriculum vitae, description of research interests, and the names and addresses of three references by March 1, 1989 to: Chairman, Department of Biology, Yale University, P.O. Box 666, New Haven, CT 06511.

Yale University is an Affirmative Action/Equal Opportunity Employer.

TUMOR BIOLOGIST

The Head and Neck Tumor Biology Program of the Eastern Virginia Medical School is recruiting a faculty member at the Assistant/Associate Professor level. The successful candidate will have a joint appointment in the Departments of Microbiology and Immunology and Immunology and Otolaryngology—Head and Neck Surgery. Investigators with research interests in molecular and cellular aspects of cancer are encouraged to apply. Applications from individuals with research experience in head and neck oncology, oncogenes, in vivo models, steroid and polypeptide hormones/receptors, and cytogenetics are particularly welcomed. An active research program and extramural research support is desirable. Major responsibilities will be to administer an independent research program and to collaborate on research projects with other faculty members. The departments are undergoing a major growth phase, with a focus on cancer research, offering the successful candidates excellent incentives, including competitive salaries, significant start-up and supplemental research funds, laboratory space and state-of-the-art equipment. Please send curriculum vitae, three letters of reference and a description of your cancer research interests to:

Kenneth D. Somers, Ph.D.
Chairman, Search Committee
Head and Neck Tumor Biology Program
Department of Microbiology and Immunology
Eastern Virginia Medical School
P.O. Box 1980
Norfolk, VA 23501

An Affirmative Action/Equal Opportunity Employer
POSTDOCTORAL FELLOWSHIPS IN MOLECULAR AND CELL BIOLOGY

Postdoctoral Fellowships are available in the Genetics and Biochemistry Branch, National Institute of Diabetes, and Digestive and Kidney Diseases, National Institutes of Health. Applications are invited from individuals of the highest caliber with Ph.D., M.D., or M.D., Ph.D. degrees. Current research interests of the staff include:

- Biosynthesis and targeting of lysosomal enzymes, the reconstitution of the cellular protein folding machinery, and the molecular genetics of Tay-Sachs disease (Rick Prola)
- Eukaryotic DNA repair, molecular mechanisms of toxin action, and mechanisms of nuclear and cytoplasmic localization of proteins and nucleic acids in Xenopus (Eric Ackerman)
- Molecular mechanisms of homologous recombination in higher eukaryotes, the biochemistry of nucleic acid-protein interactions and the formation and recognition of DNA mismatches (Peggy Hsieh)
- Biochemistry of homologous recombination in eukaryotes and prokaryotes, immunoglobulin gene rearrangements in cell-free systems, gene targeting and gene disruption in mammalian cells and structure/function studies of the CD4 protein, the HIV receptor (Dan Camerini-Otero)

Interested candidates should send a letter stating their interests, their curriculum vitae and list of publications, and the names and addresses of three references to:

Dr. R. Daniel Camerini-Otero
Chief, Genetics and Biochemistry Branch
Building 10, Room 9D-15
9000 ROCKVILLE PIKE
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-2710

NIH is an Equal Opportunity Employer

ANTIBODY TECHNOLOGY SPECIALIST

Cancer Therapeutics

The Dow Chemical Company, in Midland, Michigan, is a recognized world leader in the chemical industry. Expanded research efforts in the area of cancer therapeutics and immunotherapy have created an immediate need within the Bioproducts Laboratory in the Central Research Department for a qualified Antibody Technology Specialist.

The successful candidate will have a Ph.D. and some postdoctoral experience with developing and testing antibodies. Familiarity with state-of-the-art discovery of monoclonals, immunosays and immunochemistry is required. Research efforts will be directed toward obtaining and testing novel antibody specificities for our biotechnology-based cancer therapeutic program. The above candidates must also possess strong communication skills and a desire to carry out independent research while functioning as part of an interdisciplinary research team.

The Dow Chemical Company offers a stimulating work environment and a competitive salary and benefits package. For consideration, send your resume to: Technical Recruiting, Department AT, The Dow Chemical Company, 1801 Building, Midland, MI 48674. The Dow Chemical Company is an Equal Opportunity Employer.
UNIVERSITY OF TENNESSEE MEDICAL CENTER AT KNOXVILLE (UTMC/K)

Two tenure-track faculty positions—MEDICAL ONCOLOGY INVESTIGATOR and MOLECULAR IMMUNOLOGIST/PROTEIN BIOCHEMIST—at the assistant/associate professor level for M.D. candidates are available in the Departments of Medicine’s Human Immunology and Cancer Program. NIH- and ACS-supported clinical and basic science research with emphasis on human light chain-associated renal and systemic diseases (multiple myeloma, amyloidosis, etc.) and B-cell related neoplasms (lymphoma, leukemia, etc.). The successful candidate will work in an environment at the intersection of art and basic clinical research facilities including hybridoma/Mab, flow cytometry, protein sequence, and immunocytometry laboratories. The position is available immediately and requires a minimum of 3 to 5 years of postdoctoral experience and ability to conduct innovative research. For M.D. candidates, B.C./B.E. and eligibility for state licensure required. Excellent compensation (including fringe benefits) and academic rank commensurate with education and experience. The Knoxville area offers the scientific resources of the University of Tennessee and the Oak Ridge National Laboratory, recreational opportunities provided by the surrounding Great Smoky and Cumberlands, an extensive TVA system, and cultural amenities including a symphony and chamber orchestra, a major fine arts museum, opera, and theater. Letter of application, curriculum vitae, and names and addresses of three references should be sent to: Alan Solomon, M.D., Professor of Medicine, and Head, Human Immunology and Cancer Program, University of Tennessee Medical Center/Knoxville, 1924 Alcoa Highway, Knoxville, TN 37920.

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

MICROBIOLOGISTS. The Department of Biology at New Mexico State University (NMSU) invites applications for a single postdoctoral position starting August 1989. Applicants should be Ph.D. microbiologists with postdoctoral experience. The successful candidate will be expected to seek external funding, establish a vigorous research program in (i) applied microbiology or (ii) microbial physiology, and teach at the graduate and undergraduate levels. Current microbiology teaching is offered at both undergraduate and graduate levels. The successful candidate will be expected to have a Ph.D. in microbiology and Ph.D. degrees in biology, and participate in an interdepartmental molecular biology graduate program. Application deadline is 31 August 1989 and will include curriculum vitae, a summary of research and teaching interests, and the names, addresses, and telephone numbers of three to five references. Mail applications to: Dr. D. Blum, Head, Department of Biology, New Mexico State University, Las Cruces, NM 88003.

NMSU is an Affirmative Action/Equal Opportunity Employer. Minorities and women encouraged to apply.

POSITIONS OPEN

UNIVERSITY OF TASMANIA

Applications are invited from suitably qualified men and women for the following position:

LECTURESHIP IN PHYSICS (Reference 132/88)

The Department of Physics has a vacancy at the Lectureship level for a fixed term of 3 to 5 years in the first instance. The successful applicant will be expected to play an active part in the laboratory, engage in research and teaching, and contribute to the research ability in an area of physics comparable with departmental programs is required. Commencing salary will be within the lecturer scale $30,737—$69,975 inclusive of increments $40,100 per annum. Information concerning the position and departmental research programs may be obtained from: The Head of the Department, Dr. P. C. Hamilton, telephone: (002) 204219, Fax: (002) 204210.

Application form, appointment conditions brochure, and information is available from: The Staff Office Secretary, telephone: (002) 202013. Applications quoting reference close with: The Staff Officer, University of Tasmania, G.P.O. Box 252C, Hobart, Tasmania, Australia, 7001 on 3 February 1989.

The University is an Equal Opportunity Employer.

MICROBIAL ECOLOGY ASSISTANT PROFESSOR

HARVARD UNIVERSITY

The Department of Organismic and Evolutionary Biology, Harvard University, invites applications for a faculty position in microbial ecology, with special emphasis on symbiotic interactions between microorganisms and higher organisms. Candidates should have demonstrated excellence in research and a strong teaching record. Additional qualifications include undergraduate and graduate levels, including participation in courses in microbial diversity and ecology. Applications including curriculum vitae, statement of research interests, reprints, and three letters of reference should be sent by 1 March 1989 to:

Dr. Andrew H. Boyd
Chairman, Search Committee in Microbial Ecology
Department of Organismic and Evolutionary Biology
Harvard University
26 Oxford Street
Cambridge, MA 02138
Harvard University is an Affirmative Action/Equal Opportunity Employer.

MICROBIOLOGIST

Tenure-track assistant professor position August 1989. The department has an active, research-oriented Ph.D. program in cell-molecular biology; the candidate is expected to maintain an active and fundable research program. The candidate should have a Ph.D. and postdoctoral experience. The candidate must have demonstrated a commitment to excellence in teaching and research. Send letter of application, curriculum vitae, and three letters of reference to: Dr. William J. Brett, Chairman, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809. Application review will begin 13 February 1989. Indiana State University is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST

cloning of Bacillus thuringiensis toxin genes. A contract position is available to work on the isolation and characterization of Bt toxin genes for eventual transformation of plants to confer genetic resistance to insects or other plant pests. The successful applicant will be based in an equipped and well-equipped molecular biology facility doing research on the molecular biology of viruses and will also work with scientists involved in biological control of insects and expression of foreign genes in transgenic plants. The post is for a period of up to 3 years with a review after one year. Candidates must have appropriate qualifications and experiences. Application letter or resume with names and addresses of three referees should be sent to: Dr. P. D. Scotti, Pathology Group, Entomology Division, New Zealand Department of Scientific and Industrial Research, Private Bag, 732, Christchurch, New Zealand—Telephone: (09) 893-560 Fax: MAR C/21623 Fax: (99) 863-340. Applications should be submitted by 15 February 1989. Include curriculum vitae and names and addresses of two referees.

POSITIONS OPEN

UNIVERSITY OF WISCONSIN-MILWAUKEE

The Department of Biological Sciences invites applications for a tenured-track position at the assistant professor level in the area of molecular biology. The department is committed to diversity and the promotion of excellence in research and teaching. Salary and rank will be commensurate with experience and qualifications. Applications from women and members of ethnic minorities are especially encouraged to apply. Mailing address: Department of Biological Sciences, University of Wisconsin-Milwaukee, P.O. Box 139, Milwaukee, WI 53201. Closing date: 15 February 1989. The University of Wisconsin-Milwaukee is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF SOUTH CAROLINA

Applications are invited from qualified persons in the area of biology who have research interests in the fields of molecular genetics and immunology. Experience in research is desirable. Salary and rank are commensurate with qualifications and experience. Applications should be sent to: Dr. P. L. Deiters, Chairman, Search Committee, Department of Biology, University of South Carolina, 1105 Main Street, Columbia, SC 29208. Applications will be accepted until the position is filled. The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF COLORADO

The Department of Kinesiology invites applications for a faculty position beginning August 1989. Applicants are encouraged to apply regardless of race, sex, or national origin. All applications will be considered, with a special interest in minority applicants. Applications should be submitted by 15 December 1988 to: Dr. Robert Martin, Chairman, Search Committee, Department of Kinesiology, University of Colorado, Boulder, CO 80309-0264. The University of Colorado is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF COLORADO

Applications are invited from qualified persons in the area of molecular genetics. The department is committed to diversity and the promotion of excellence in research and teaching. Salary and rank will be commensurate with experience and qualifications. Applications from women and members of ethnic minorities are especially encouraged to apply. Mailing address: Department of Biology, University of Colorado, Boulder, CO 80309. The University of Colorado is an Equal Opportunity/Affirmative Action Employer.
**DIRECTOR**

**EPPELEY INSTITUTE FOR RESEARCH IN CANCER AND ALLIED DISEASES**

**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

The University of Nebraska Medical Center invites nominations/applications for the position of Director of the Eppley Institute. The Eppley Institute currently has a multidisciplinary faculty of approximately 20 members holding joint appointments in various academic departments, and a total staff of approximately 120. It has been designated as one of 15 NCI Laboratory Cancer Research Centers and has received a Special Institutional Grant from the American Cancer Society. Graduate students and postdoctoral fellows are supported partially by an NIH Training Grant. The Director is responsible for all the activities of the Institute and reports directly to the Chancellor of the Medical Center.

The successful applicant should have an outstanding record of scientific accomplishment that would qualify him/her for the rank of Professor in a basic science department. The individual must be familiar with the activities of a modern health science center, cancer research funding programs and/or agencies, and have significant administrative experience. Evidence of an ongoing program in basic cancer research also is essential. Applicants should submit a current curriculum vitae and the names of three individuals who will serve as references. Closing date for receipt of applications/nominations is 15 February 1989. Applications/nominations should be sent to:

William O. Berndt, Ph.D.

Vice Chancellor for Academic Affairs

Room 5009 Conkling Hall

University of Nebraska Medical Center

42nd and Dewey Avenue

Omaha, Nebraska 68105

The University of Nebraska Medical Center is an Affirmative Action/Equal Employment Opportunity Employer.

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**LOOKING FOR A CAREER CHANGE?**

An editorial position at *Science* is available for a PhD biomedical scientist with a broad range of interests and research experience in one or more of the following areas: molecular pharmacology and physiology, pre-clinical sciences, structural biology, or eucaryotic molecular biology. We are seeking someone with at least two or three years of post-doctoral experience in quantitative aspects of the life sciences and publications in the refereed literature. Editors have varied responsibilities in manuscript selection ranging from solicitation to editing for clarity. Previous editorial experience is not required. This is a full-time position in our Washington offices.

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

Mr. Gregory Stokes

AAAS

1333 H Street, NW

Washington, DC 20005

EOE

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**Research Manager**

**CNS Neuropharmacology**

As part of our recently announced phase of expansion, culminating in our move to new research headquarters at Stevenage, we now have a personal development opportunity for an experienced pharmacologist.

Working initially at Ware in Hertfordshire, you will take managerial responsibility for 2-3 teams of scientists in the Neuropharmacology Department engaged in the search for drugs to treat diseases of the Central Nervous System. As a member of the Research Management Committee for CNS therapeutic targets you will be expected to make a substantial contribution to the direction of research in this area. You will also take specific project responsibility for an interdisciplinary group concerned with the discovery of novel treatments for a particular psychiatric disease.

You should have six or more years' relevant post-doctoral research experience and a sound understanding of receptor pharmacology. You will have developed an interest in neuro- or psychopharmacological research and have several years' experience of supervising a research team in an industrial environment.

Remuneration for this senior appointment will be above average for the sector and the benefits package will include managed relocation assistance where appropriate.

Please send your curriculum vitae or apply for an application form to: Ted Smith, Senior Personnel Officer, Glaxo Group Research Ltd., Ware, Herts SG12 0DP Tel: 0920 3993, ext. 2540. Please quote reference W88362.

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**Glaxo Group Research**
ORGANIC CHEMIST: Applications are invited for a tenure-track position in the Chemistry Department at Whitman College in Ada, Washington. The position is open to Ph.D.s in an area of organic chemistry. Applicants must have ACS-certified B.A. A recent Ph.D. in chemistry is required. Duties include teaching organic lecture and laboratory courses, and directing a course related to molecular biology. Ph.D. is required. Send curriculum vitae, three letters of recommendation, and a teaching statement to: D. L. Freese, Chair, Department of Chemistry, Whitman College, Walla Walla, WA 99362 by 15 February 1989. Rank and salary depend on experience. Whitman is an Affirmative Action/Equal Opportunity Employer.

PHARMACOLOGY: University of South Florida (USF), College of Medicine. The Department of Pharmacology seeks to fill a position in the area of molecular biology. Applicants should have a Ph.D. degree in biology or a related discipline and should have experience in the field. The candidate is expected to establish a new research program in the area of molecular biology. Teaching experience at the college level is required. Candidates should submit a curriculum vitae, letters of recommendation, and a statement of research interests and teaching experience. Applications should be sent to: Dr. H. Russell, Ph.D., MDC-9, College of Medicine, USF, Tampa, FL 33612. Closing date is 15 February 1989. The University of South Florida is an Affirmative Action/Equal Opportunity Employer.

NEUROBIOLOGIST—A tenure-track position will be available in September 1989. Teaching duties include neurobiology, a junior seminar, and participation in the biology core sequence and in Allegheny's Liberal Studies Program. In addition to teaching, establishment of a research program and direction of student research projects is expected. Substantial research support is available on a competitive basis, and funds provided by the Howard Hughes Medical Institute. We are seeking individuals with demonstrated excellence in both teaching and research, as well as a strong commitment to liberal arts education. The successful candidate will also be expected to contribute to the design of our new biology building. Send curriculum vitae, statements of teaching and research interests, names and addresses of three references, and graduate transcripts to: Dr. Glen Wurst, Chair, Biology Department, Allegheny College, Meadville, PA 16335. Review of credentials will begin 15 February 1989. Equal Opportunity Employer.

PHYSICAL SCIENTIST.—The Department of Natural Science at Castleton State College seeks applications for a tenure-track position in the physical sciences/science education. The ideal candidate will be a dynamic educator with a Ph.D. in chemistry (analytical, inorganic, atmospheric or environmental) or geology ("soft rock"). Strong candidates with a Ph.D. in science education will be considered. A background in secondary education and the ability to teach a variety of physical science courses may enhance the candidacy. Responsibilities will include teaching courses in the physical sciences and the education/supervision of student teachers. This person should be able to work effectively with colleagues/students and contribute to the growth and development of the department. Review of applications will begin on 6 February 1989. Send résumé and three letters of reference to: Dr. Patrick W. Murphy, Dean of the College, Castleton State College, Castleton, VT 05735. Equal Opportunity Employer.

PLANT PROTEIN BIOCHEMISTRY, POSTDOCTORAL ASSOCIATE, North Carolina State University, Raleigh, North Carolina to work on purification and characterization of proteins involved in lignin biosynthesis in plants. Please send résumé and names of references to: Ronald Sedoroff Department of Biochemistry, Box 7622 North Carolina State University, Raleigh, NC 27695

PLANT BIOCHEMISTRY, POSTDOCTORAL ASSOCIATE, North Carolina State University, Raleigh, North Carolina to work on purification and characterization of proteins involved in lignin biosynthesis in plants. Please send résumé and names of references to: Ronald Sedoroff Department of Biochemistry, Box 7622 North Carolina State University, Raleigh, NC 27695

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE We study a multigene family located in Balbiani rings on polytene chromosomes in Drosophila melanogaster and Chironomus. These genes encode secretory polypeptides which assemble in vivo into an insoluble silk fiber. Current efforts are directed at (i) characterizing additional genes/proteins in this family and (ii) learning how secretory polypeptides assemble in vitro into silk. Applicants should have experience in one or more of the following areas: genetics, biochemistry, cell biology, immunology, molecular biology, and immunocytochemistry (fluorescent and EM); physical studies on synthetic peptides/proteins; DNA cloning and sequencing. Send curriculum vitae, summary of research experience and three recommendation letters to: Dr. Steven T. Case, Department of Biochemistry, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4050. Equal Opportunity Employer, M/F/H/V.
IMMUNOCHEMIST

SENIOR

RESEARCH

SCIENTIST

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The Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug, Inc. announces an opening for a Sr. Research Scientist in its Immunobiology Department of its Great Valley, Pennsylvania facility.

An opportunity exists for an outstanding researcher to participate in Sterling Research Group's discovery program on monoclonal antibody immunonjugates. Scientists who have achieved a record of excellence in the design, synthesis, and molecular characterization of immunonjugates for in vivo use are invited to apply. We seek highly motivated individuals with superior bench skills, supervisory ability, and a desire to collaborate with other scientists in a team effort to develop novel agents for the therapy of cancer. This position requires a Ph.D. degree and postdoctoral experience.

We offer attractive salary and benefit programs and an exciting work environment based on a team approach to research and development.

Please send resume in confidence to:

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Research Group
A Division of Sterling Drug Inc.
9 Great Valley Parkway
Great Valley, PA 19355
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RESEARCH SCIENTIST

The Upjohn Company, a recognized leader in the research and development of pharmaceuticals, is seeking a highly motivated scientist for our Drug Metabolism Research group. This scientist is to function as a member of the interdisciplinary teams to make innovative contributions in bioanalytical research projects aimed at discovery, selection and development of new pharmaceutical products. These projects include the development of specific and sensitive methods for the quantitative measurement of drugs, with special emphasis on proteins, peptides, and biologicals, and their metabolites in biological samples. These projects also include the establishment of new bioanalytical technology and the applications in biopharmaceutical and pharmacokinetic studies during lead-finding and pre-clinical phases of drug development.

This position requires a Ph.D., preferably with post-doctoral experience, in biochemistry, biotechnology, pharmaceutical sciences or a closely related field. Ability to plan and carry out or direct a group to conduct the development validation, and trouble shooting bioanalytical methods for peptides, biological products, and drugs and their metabolites in biological samples is essential. Previous experience in quantitative analysis using enzymatic, immunological, chromatographic, and other physico-chemical or biochemical methods in the pharmaceutical industry or academia is highly desirable. Excellent problem solving skills, oral and written communication skills, and the ability to initiate and conduct interdisciplinary research with others or independently are also required.

Upjohn is located in Kalamazoo in southwestern Michigan, midway between Chicago and Detroit and offers varied cultural events, lakes and woodlands minutes away, abundant year-round sports and recreation. Upjohn offers personal and career advancement opportunities, a competitive salary commensurate with experience, comprehensive benefits and relocation assistance. For confidential consideration, please send your CV/resume to M. William Rex, The Upjohn Company, Corporate Employment, Kalamazoo, MI 49001. Please refer to advertisement number 23755-GA in your correspondence. We are an Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...
POSITIONS OPEN

PLANT PHYSIOLOGIST

Gettysburg College, a highly selective liberal arts college, invites applications for a 1-year Sabbatical leave replacement position for 1998-1999 at the assistant professor level to teach an undergraduate course in plant physiology in the spring and participate in the introductory biology course in the fall. Course load permits time for research. Please submit curriculum vitae, brief statement of research interests, and three letters of reference by 3 February 2019 to: Dr. Sherman Hendrets, Department of Biology, Gettysburg College, Gettysburg, PA, 17325.

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

POSTDOCTORAL FELLOWS

The Limnology Research Centre, McGill University has two openings. Area of aquatic expertise is open but applications in contaminant cycling or acidification, land-water interactions, or sediment biogeochemistry are especially welcomed.

Send curriculum vitae, statement of research interests, and arrange for three letters of reference by 1 March 1999 to: Dr. J. Kalff, Department of Biology, McGill University, 1205 Avenue Docteur Penfield, Montreal, Quebec, Canada. H3A 1B1.

Non-Canadians are encouraged to apply.

POSTDOCTORAL POSITION

available immediately for NIH-funded biological studies of adrenergic receptor-G protein mechanisms using rapid kinetic and fluorescence spectroscopic methods. Receptor and G protein coupling (Biochemistry 27, 2374–84 (1988)). G protein membrane distribution, mobility and subunit interactions will be studied. Background in receptor methodology, protein purification or fluorescence spectroscopy desirable. Send curriculum vitae and names of three references to: Dr. Richard Neubig, Department of Pharmacology, University of Michigan, School of Medicine, M6322 Medical Science Building I, Ann Arbor, MI 48109-0626. The University of Michigan is a Nondiscriminatory Affirmative Action Employer.

POSITIONS OPEN

A position for a POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE IN NEUROBIOLOGY is currently available. Supported by an NIH grant through 1993, the project is studying interactions between axons and their target neurons in the developing and adult nervous system. [see Cur. Top. Dev. Biol. 21, 309–340 (1987)]. The project involves experimental embryology, tissue culture, recording from and labeling neurons in brain slices, pharmacology, and morphometric analyses. Experience in electrophysiology or tissue culture of neurons is desirable. The position offers a competitive salary and benefits. The University of Utah is an Equal Opportunity Employer. Please send curriculum vitae and the names of three evaluators to: Dr. T. N. Parks, Department of Anatomy, University of Utah School of Medicine, Salt Lake City, UT 84132.

POSTDOCTORAL POSITION available immediately for molecular biologist/biostatistician to study transcription and translation factors regulating ferritin synthesis in normal and diseased states. Available for up to 3 years. Please send curriculum vitae and letters of recommendation to: Dr. Jim Drysdale, Department of Biochemistry, Tufts University, School of Medicine, 136 Harrison Avenue, Boston, MA 02111.

POSTDOCTORAL POSITION available to study lipid transport in cellular and membrane systems. Freeze fracture, monolayer, calorimetric and NMR techniques will be used to define cerebroside and ganglioside-induced changes in membrane structure that regulate interactions between glycolipid transfer protein and biological surfaces. Requires Ph.D. in biochemistry or related discipline, and preference will be given to individuals with experience in the above techniques. Salary is above NIH scale with fringe benefit package. Send curriculum vitae and names of three references to: Dr. Rhoderick E. Brown, The Hormel Institute, University of Minnesota, 801 16th Avenue N.E., Austin, MN 55912. Telephone: 507-453-8800. The Hormel Institute is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

POSITIONS OPEN

The Program in Ecology, Evolution, and Behavior of the Department of Biology at Princeton University plans to spend two postdoctoral positions to begin in September 1989, one a tenure-track assistant professor, the other at an open rank. Preference will be given to candidates with a strong research program involving field work or theory in ecology and evolutionary biology. The current faculty of Princeton's Graduate Program in Ecology, Evolution, and Behavior consists of Drs. J. Peter Grimes, John McPeek, Jim Gould, Peter Grant, Henry Horn, Steve Hubbell, Marty Kreitman, Bob Lisk, Naomi Pierce, Dan Rubenstein, and Ted Sudman. The closing date for applications is 3 March 1989. Applicants should send curriculum vitae and arrange for three letters of reference to be sent to: Dan Rubenstein, Search Committee, Program in Ecology, Evolution, and Behavior, Guyot Hall, Princeton University, Princeton, NJ 08544-1003.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS are available for summer research at the Mountain Lake Biological Station of the University of Virginia. The station is located in the mountains of southwestern Virginia. Proposals will be considered in population biology and evolution. Deadline for applications: 15 March 1989. Write to: Director, Mountain Lake Biological Station, Room 251, Gilmer Hall, University of Virginia, Charlottesville, VA 22901. Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL POPULATION RESEARCH

The Carolina Population Center invites applications for a postdoctoral fellowship to study interrelationships of hormones and social behavior in normal adolescent boys and girls and adult women. Doctoral discipline open, 2-year appointment beginning any time is planned. Please contact: J. Richard Udry, Director, Carolina Population Center, University of North Carolina, 125 West Franklin Street, Chapel Hill, NC 27516-3997 or telephone: 919-966-1710. Equal Opportunity/Affirmative Action Employer.

SUPERVISORY RESEARCH PHYSICAL SCIENTIST

$48,592-$63,171 per annum

(salary dependent upon qualifications)

The U.S. Army Cold Regions Research and Engineering Laboratory, Hanover, N.H., is recruiting to fill the position of Supervisory Research Physical Scientist, GM-14.

Duties: Serves as the Chief of the Geophysical Sciences Branch. Directs the activities of approximately 20 professional, technical, and support personnel engaged in basic and applied research in the following areas: effects of cold regions environments and backgrounds on electromagnetic and acoustic waves, seismic propagation, optical properties of materials, radiation exchange, and related phenomena. Performs independent research in a technical area related to the above.

Qualifications: Bachelor's Degree in a related field of science or engineering (Ph.D. preferred) plus at least three years appropriate management and research experience or graduate education. Candidates must have demonstrated technical competence and potential to function effectively in a research management position.

For information and application package, contact Susan Koh, Personnel Management Specialist, U.S. Army Cold Regions Research and Engineering Laboratory, 72 Lyme Road, Hanover, NH 03755-1290 or (603) 646-4500.

Closing Date: January 27, 1989.

An Equal Opportunity Employer

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

MEDICAL BIOTECHNOLOGY CENTER

Molecular Neurobiologist

The Medical Biotechnology Center of the Maryland Biotechnology Institute, in conjunction with the Department of Neurology, University of Maryland Medical School, is seeking a full-time, tenure-track investigator with expertise in mammalian molecular biology. The position requires a Ph.D. degree with at least two years of relevant postdoctoral training and experience. Significant research accomplishment and the ability to obtain independent funding are essential. In addition to establishing an independent research program, the successful candidate is expected to initiate and participate in projects involving molecular neurobiology. Particular focus will be on the identification, isolation, and characterization of genes and gene products associated with neurodegenerative diseases.

The Medical Biotechnology Center offers a creative and challenging scientific environment, with considerable opportunity for interaction and collaboration with cellular and molecular biologists representing a wide diversity of interests. The Center is a new facility utilizing state-of-the-art techniques and equipment in the pursuit of a broad range of basic and applied scientific projects.

The Department of Neurology has strong research programs in neuromuscular, cerebrovascular disease and epilepsy. These interests, plus new initiatives investigating various neurodegenerative diseases, require significant expertise in the molecular biology of the nervous system. This position will allow active interaction with several young productive neuroscientists employing contemporary skills to evaluate disorders of the nervous system.

Salary and academic rank are commensurate with qualifications and experience. Applications should include a current curriculum vitae, a detailed statement of past experience and future research goals, a list of four to six references, and a one page description of future research plans and the names, addresses, and phone numbers of three professional references. The University of Maryland is an equal opportunity employer. Send all applications to:

Maimon M. Cohen, Ph.D.
Acting Co-Director, Medical Biotechnology Center
University of Maryland at Baltimore
618 West Lombard Street—Second Floor
Baltimore, MD 21201
BIOCHEMIST

Research & Development Challenge

An industry-leading manufacturer has an opportunity for you in its R&D laboratories in the Richmond, VA area. You will be involved with performing studies in the field of biochemistry.

Experience in plant biochemistry and/or molecular biology is highly desirable. A background in protein purification, radiolabeled methods and immunochemical techniques would be beneficial. A graduate degree is required.

You will receive a competitive salary and comprehensive benefits, including relocation assistance. Send your resume to:

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POSTDOCTORAL FELLOW
Macromolecular Modeling

The Squibb Institute for Medical Research is recognized internationally as a leader in the research and development of novel bioactive compounds. We have recently established a Department of Macromolecular Modeling, with the aim of studying fundamental properties of biopolymers. We are offering a Postdoctoral Fellowship position in computer-aided study of protein structure.

You will conduct basic research focused on development of novel computational approaches towards binding energy calculations, and conformational searches as used in model-building. This work may be broadened into other areas of structure, energetics, and interactions of molecules such as, e.g., stereochemistry and complementarity of protein-ligand interactions, antibody specificity, and macromolecular design in general. The Department of Macromolecular Modeling uses the Squibb cluster of VAX 8700 computers, as well as its own MicroVax and Silicon Graphics workstations.

The activities of our Department will be coordinated with those of the Departments of Macromolecular Crystallography and Macromolecular N.M.R. Spectroscopy of the Squibb Institute. Joint research activities are currently under way between the institute and Princeton University, and are likely to involve the future Squibb Postdoctoral Fellows as well.

Qualified candidates should hold a Ph.D. degree in chemistry or related disciplines and have experience in computational structural science, computer programming, graphics, etc.

This position is based in Princeton, New Jersey, a pleasant semi-rural community located mid-way between New York City and Philadelphia. For consideration please submit curriculum vitae to: The Squibb Institute for Medical Research, Human Resources Department 150, P.O. Box 4000, Princeton, NJ 08543-4000. An equal opportunity employer.

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NEW YORK, N.Y. 10036
POSTDOCTORAL POSITION available to study root organogenesis. For description of project and qualifications, send one reference letter and a vita to: Dr. J. L. Sunkel, Department of Botany, University of California, Los Angeles, Calif. 90024.

POSTDOCTORAL POSITION available to study the biology of the p-galactosidase operon in E. coli. Send curriculum vitae and the names of three references to: Dr. C. K. Kaiser, Department of Biochemistry, University of Washington, Seattle, Washington 98195.

POSTDOCTORAL POSITION available to study the control of cell growth in mammalian systems. Send curriculum vitae and the names of three references to: Department of Biology, University of California, Los Angeles, Calif. 90024.

POSTDOCTORAL POSITION available to study the role of nucleoside transporters in the resistance of bacteria to nucleoside analogs. Send curriculum vitae and the names of three references to: Dr. C. K. Kaiser, Department of Biochemistry, University of Washington, Seattle, Washington 98195.

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RESEARCH ASSOCIATES/ASSISTANTS

Cetus Corporation, a leader in the development of biotechnology-based health care products, has 3 positions open for Research Associates and Research Assistants in the Protein Chemistry Department.

These positions provide opportunities to conduct novel research on the isolation and characterization of native and cloned proteins to be used as pharmaceutical drugs in humans.

We require a Bachelors or Masters degree and a minimum of 2-3 years' relevant experience in protein chemistry. Preference will be given to candidates who demonstrate an understanding of molecular biology and/or immunology. Experience in the isolation and characterization of protein at the microgram level, preferably with HPLC, is also desirable.

Cetus offers excellent salaries, benefits, and unique advancement opportunities. For immediate consideration please send your C.V., including publications and references, to Cetus Corporation, Box SCKK, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.

RESEARCH SCIENTIST PHARMACOLOGY

Amgen is a dynamic, growing organization producing human therapeutic products through recombinant DNA technology. Our leadership in the development of Erythropoietin and Granulocyte Colony Stimulating Factor has placed us at the leading edge of the biotechnology industry. Our continued growth has created an immediate opportunity for a Research Scientist in our Pharmacology Group.

Applicants must possess a Ph.D. in Pharmacology or a related discipline with a strong background in whole animal research and experience in one or more of the following areas: inflammation, wound repair, immunopharmacology, hematology and oncology. Proficiency in statistical analysis of data is essential, and postdoctoral training is highly desirable.

Amgen offers a competitive compensation and benefits package, including equity participation, as well as a challenging and stimulating research environment. Our location one hour northwest of Los Angeles offers the best in Southern California living. Qualified applicants should direct a resume and a list of 3 references, in confidence, to:

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Faculty Openings

MIT's Department of Brain and Cognitive Sciences announces openings for junior faculty members in neurobiology.

A successful candidate will be engaged in research related to neuroscience, e.g. cell and molecular biology of neurons, genetic specifications of neural development and behavior, or membrane biophysics. Requires a Ph.D. with substantive research in one or more of the above areas. Ability to teach undergraduate and graduate level courses and to develop a strong research program.

Interested applicants should send a Curriculum Vitae, a short statement of proposed research and the names of at least three references to: Dr. Emilio Sarris, Chairmen. Department of Brain and Cognitive Sciences, Bldg. E32-528, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139.

MIT is an Affirmative Action/Equal Opportunity Employer. Qualified minorities and women are encouraged to apply.

MIT is a non-smoking environment.

Massachusetts Institute of Technology

OPPORTUNITIES
IN BIOTECHNOLOGY

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

This scientist will manage the tissue culture and cell biology laboratory producing recombinant proteins in eukaryotic cells. Responsibilities will include directing research using cell-based assays to examine protein structure and function, and coordinating mammalian and insect cell culture. A Ph.D. is preferred with a history of research which applies protein chemistry or molecular biology training to cell biology questions.

The successful candidate will participate in programs to develop vaccines, diagnostics, and therapies for retroviral infections. Responsibilities will include directing a group studying HIV neutralization and cell surface interactions. This scientist will also organize and supervise a BL-3 containment lab. The position requires a Ph.D. in Virology or other appropriate field with specialization in virology. Experience with human infectious agents is a must and supervisory experience is preferred.

Repligen Corporation offers a competitive salary, excellent benefits, and equity participation. Please submit a cover letter, resume and references to: Barbara Fleming, Recruiter, Repligen Corporation, One Kendall Square, Bldg. 700, Cambridge, MA 02139. An Equal Opportunity Employer.
RESEARCH ASSOCIATE position available immediately to study the role of dopamine and dopamine receptors in motivation and behavioral control under normal and drug-exposed conditions. Research will involve in vitro and in vivo techniques. Qualifications: Ph.D. in pharmacology, physiology, or a related field with appropriate coursework and experience. Applicants must have a strong interest in drug research and the ability to work independently. Applications should be submitted to: Dr. David E. Potter, Ph.D., The Center for Biotechnology, Baylor College of Medicine, The Woodlands, TX 77381. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE in BRYOLOGY for HERBARIUM HARVARD UNIVERSITY Applications are invited from systematists with Ph.D. in botany who are conducting research in bryology. Training and interests should include new or promising methodologies, techniques, or philosophies in systematic and evolutionary research. Primary responsibility will be to conduct an active research program in bryology, as well as to participate in administration and curatorial activities of the Farlow Herbarium bryophyte collection.

Appointment is to be annual with possibility of up to 5 years. Applications including curriculum vitae, statement of research interests, reprints of recent publications and three letters of reference should be sent by 1 March 1989 to:

Dr. Donald H. Pfister
Harvard University Herbaria
22 Divinity Avenue
Cambridge, MA 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE in QUANTUM OPTICS—U.S. Department of Energy Director of Laboratory (Washington, D.C.). Two Associate Scientist positions are available immediately. Experience in laser physics, quantum electronics, atomic collisions, and/or nonlinear optics is required. Fellowships available at all levels will be considered. Application should include a brief statement of research interests and curriculum vitae. Submit by January 31 to: Dr. William E. Odom, Chairman, Department of Environmental Science, Clark Hall, The University of Virginia, Charlottesville, VA 22903. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

SENIOR ASSOCIATE, ENVIRONMENTAL HEALTH INSTITUTE (Burlington)

Full or associate professor level, M.D. or Ph.D. with strong credentials in environmental health-related research needed for principal position in non-for-profit think tank of environmental agency. Candidate must be well published and a recognized leader in an environmental effects laboratory science, such as cellular or molecular biology, toxicology or pharmacology, or in a related occupational area of health effects research, such as biostatistics or epidemiology. EHI focuses on genetic-environmental interactions in its studies on the health effects of chemical and physical agents. The Institute is located in the Berkshires of western Massachusetts. An Equal Opportunity Employer. Contact: Dr. David H. TePaske, EHI, 742 North Street, Pittsfield, MA 01201.

RESEARCH ASSOCIATE PROFESSOR, DEPARTMENT OF OPHTHALMOLOGY WASHINGTON UNIVERSITY IN ST. LOUIS The Department of Ophthalmology, Washington University in St. Louis seeks candidates for research assistant professor. Must be M.D. or Ph.D. with 2 to 4 years of experience. Responsibilities include major role in eye research necessary, but should have experience in lymphokinetics, T-cell development, monoclonal antibodies, molecular biology, and/or protein chemistry. Strong ties maintained with the School of Medicine.

Applicants must be willing to commit at least 70% effort to research and to participate in other activities of the Department. Applications should include a statement of research interests and research experience, curriculum vitae and names of three references to: Dr. Henry J. Kaplan, Department of Ophthalmology, Box 8096, St. Louis, MO 63110. IUW is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST/ SENIOR RESEARCH SCIENTIST IN VITRO PLANT RESEARCH CSIRO Division of Horticulture has a position available for a scientist to conduct in vitro plant research in the following areas: meristem culture for plant propagation and virus elimination, embryo and protoplast culture and in vitro disease improvement. An indefinite appointment with Australian Government Superannuation benefits is available. Applicants should hold a Ph.D. with experience in plant tissue culture methodologies. The Division may also consider in-house training in the appropriate techniques for a well qualified plant physiologist interested in developing this research area. Salary: A$31,003 to A$45,177 per annum. A higher salary may be available for a more experienced scientist. Duties: intensive selection of plant material for research available from: Dr. R. Walker, telephone: Australia 6160-256-856; fax: 6150-256-823. Application quoting reference no. M88/1 to: Chief, CSIRO Division of Horticulture, GPO Box 350, Adelaide SA 5001, Australia, by 4 weeks from date of publication. CSIRO is an Equal Opportunity Employer.

SOCIAL MEDICINE CHAIR The University of North Carolina at Chapel Hill invites nominations and applications for the position of Chair of its Department of Social Medicine. The 11-person faculty in Social Medicine, one of the university's largest programs, offers an extensive teaching program for medical students and residents in the medical humanities and social sciences, and in epidemiology and preventive medicine. The Department is currently involved in a wide range of projects including prevention, chronic illness and disability, child abuse and neglect, social and medical ethics, medical care organization and administration and several other topics in the humanities and social sciences.

We seek an individual who has demonstrated significant accomplishment both in social and medical education, and who will build a strong, established, interdisciplinary department into a leading force in the School of Medicine, the University, and the disciplines involved. Candidates should hold a doctorate in medicine, in public health, or in a field of the humanities or social sciences. Applications and nominations, accompanied by curriculum vitae and other supporting material, should be sent before 15 February 1989 to: Robert C. Cefalo, M.D., Chair, Search Committee for Chair, Department of Social Medicine, University of North Carolina at Chapel Hill, Office of the Dean, School of Medicine, CB# 8640, Chapel Hill, NC 27599-7000. Women and minorities are encouraged to identify themselves voluntarily. The University of North Carolina is an Affirmative Action/Equal Opportunity Employer.


RESEARCH ASSOCIATE Conducts research in growth factor gene regulation of mammalian cells; performs laboratory work including cloning, expression and amplification of cDNAs, and in vitro transcriptions; prepares oral and written reports; prepares research papers. Forty hours weekly; benefit package. Submit CV and letter of interest to: Dr. David E. Potter, Ph.D., The Center for Biotechnology, Baylor College of Medicine, The Woodlands, TX 77381. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE on molecular and biochemical mechanisms of retrotransposon transposition in Drosophila. Ph.D. or M.D. required. Research will be directed toward defining the molecular basis of transposition events, and in vitro transcriptions; prepares oral and written reports; prepares research papers. Forty hours weekly; benefit package. Submit CV and letter of interest to: Dr. David E. Potter, Ph.D., The Center for Biotechnology, Baylor College of Medicine, The Woodlands, TX 77381. Equal Opportunity/Affirmative Action Employer.

VERTEBRATE BIOLOGIST: Tenure-track associate professor, August 1989. Position involves teaching in aquatic and introductory biology. Emphasis on undergraduate teaching; research activity and publication required. Send resume, cover letter and three letters of recommendation by 1 March 1989 to: Dr. Gerald I. Stane, Department of Natural Sciences, University of North Florida, Jacksonville, FL 32216. UNF is an Equal Opportunity/Affirmative Action Employer.

VERTEBRATE ECOLOGIST The Department of Biology at the University of Northern Iowa invites applications from individuals with a Ph.D. degree, for a tenure-track position effective August 1989. The applicant's research must be in the ecology of birds or mammals and have a significant field component, with some preference given to those whose research is in the area of avian behavior. The research specialty should involve participation by graduate and undergraduate students. Teaching responsibilities typically include three courses per year. Typical courses include an introductory course in vertebrate zoology, an advanced course in the applicant's specialty, and an introductory biology course. An ability to prepare and maintain a small research laboratory at the University of Iowa Lakeside Laboratory. The assignment is 75% teaching and 25% research, and the department prefers that the candidate have teaching experience or post-doctoral research preferred. Applicants should send curriculum vitae, transcripts, a statement of interests and goals in both teaching and research, evidence of teaching ability, and three letters of recommendation before 15 February 1989 to: Dr. Russell E. TePaske, Department of Biology, University of Northern Iowa, Cedar Falls, IA 50614-0421. The University of Northern Iowa is an Equal Opportunity Educator and Employer with a comprehensive plan for Affirmative Action.

The University of Northern Iowa invites and encourages applications from women and minorities.

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Mettlers Post Office
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CLARK INSTITUTE OF PSYCHIATRY—UNIVERSITY OF TORONTO

Positions are available for a new Positron Emission Tomography Facility at the Clarke Institute of Psychiatry, University of Toronto in late 1989. This facility will be dedicated to neuropsychiatric research and will be equipped with the Scanditronix 17Mev cyclotron and a seven slice camera.

CLINICAL CO-ORDINATOR—M.D. essential, nuclear medicine physician with experience in a PET facility.

RADIOCHEMIST—Ph.D. with experience in the synthesis and development of C-11 and F-18 radioligands including neurotransmitters and neuropeptides.

PHYSICIST—Ph.D., familiar with the methodology and instrumentation of PET and related imaging technology.

All the above are research and teaching positions with a University Appointment at the appropriate rank.

Address replies, with references to
Dr. Vivian M. Rakoff
Director and Psychiatrist-in-Chief
Clarke Institute of Psychiatry
250 College Street
Toronto Ontario
M5T 1R8
Canada

All applications will be considered. However, in accordance with Canadian immigration requirements, this advertisement is at first directed to Canadian citizens and permanent residents.

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SUMMER 1989
TEN ENVIRONMENTAL SCIENCE AND ENGINEERING FELLOWSHIPS

Applications invited

The American Association for the Advancement of Science (AAAS) invites applications for ten Environmental Science and Engineering Fellowships available for summer 1989. The Fellows will work closely with the Environmental Protection Agency (EPA), Office of Research and Development, and other program offices, in Washington, DC, and assist in identifying and assessing the significance of long-range environmental problems and opportunities. The ten-week appointments are scheduled for 5 June through 11 August 1989. The awards will be announced prior to the end of April 1989.

Postdoctoral to mid-career scientists, engineers, and other appropriate professionals are encouraged to apply. Candidates may be from the physical, biological, or behavioral sciences, or any field of engineering or other relevant professional fields. They are expected to be critical thinkers, articulate, adaptable, and able to work with a variety of people from different professional backgrounds.

The 1989 Environmental Fellows will receive a taxable stipend of $750 per week and a nominal additional amount for temporary relocation expenses and travel in connection with the fellowships.

A detailed, future-oriented research project will be conducted by each Fellow, which is of mutual interest to him or herself and the EPA. A project report will be submitted at the completion of the summer's work. Typical areas of research interest within EPA include: environmental risk assessment; biological pesticides; acid deposition; mobile source air pollution; oxidants, gases and particles; municipal waste water and spills; drinking water; hazardous waste; chemical testing and assessment; pesticides; radiation; and energy.

For further information and specific application requirements contact:

Environmental Science and Engineering Fellows Program
American Association for the Advancement of Science
1333 H Street, NW, Washington, DC 20005
Telephone: 202-326-6600

Deadline for applications is 1 March 1989

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Scientific Opportunities

Bio-dynamics is one of the world's foremost consulting toxicology research laboratories. We are located in central New Jersey and are currently expanding our research and development efforts. We require scientific professionals in the following areas:

TOXICOLOGY STUDY DIRECTORS
Responsibilities include all aspects of study management including client consultation, program development, data review and interpretation, report preparation and regulatory interface. Requirements include a Ph.D. in Toxicology, Pharmacology or other related disciplines and 3-5 years of experience in general toxicology. Pharmacokinetics, drug metabolism or neurobehavioral toxicology experience a plus.

LAB ANIMAL MANAGER
Responsible for management of a large Technical staff involved in the implementation of toxicology studies including scheduling of manpower, allocation of equipment, ensuring adherence to good laboratory practices, protocols as well as quality and safety standards. Requirements include a B.S. degree in Biology, Toxicology or Animal Sciences and 3-5 years supervisory experience in a pharmaceutical, chemical or research and development organization engaged in research. Personnel management and organizational skills are essential.

All positions require the ability to effectively interact with all levels of management in addition to superior oral and written communication skills.

We offer a competitive starting salary, superior benefits package and the opportunity to join an organization that is on the forefront of toxicology research.

Please send a confidential resume including salary history and requirements to: Personnel Manager—Dept. 5106

Bio/dynamics Inc.
Mettlers Road, PO Box 2360, East Millstone, New Jersey 08875-2360
An Equal Opportunity Employer

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Gastrointestinal Diseases Research

The Procter & Gamble Company in Cincinnati, Ohio, is seeking an entry-level Ph.D. physiologist or microbiologist to study the host-parasite interaction for gastrointestinal (GI) infectious diseases. The individual will work in a GI research group interested in understanding the mechanisms of bacterial pathogenesis. Preference will be given to individuals familiar with in vitro and in vivo models to study mucus production. Good communication skills and the desire to work in an interdisciplinary environment are also important requirements. Postdoctoral experience is desirable but not required. Applicants must be U.S. citizens or permanent residents. Send resume and publication list to:

Dr. T.J. Logan, Manager
Ph.D. Recruiting
GI Disease Research Position, Box S
THE PROCTER & GAMBLE COMPANY
Miami Valley Laboratories
P.O. Box 398707
Cincinnati, Ohio 45239-8707
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**POSITIONS OPEN**

**SCIENTIST**

Program Resources, Inc. (PRI), the operations and technical support contractor to the National Cancer Institute's Frederick Research Facility, is seeking an individual with expertise in the molecular biology of cancer. You will be engaged in cloning a tumor suppressor gene (on human chromosome 3p) that functions to suppress renal cell carcinoma and small cell lung carcinoma and possibly a host of other human cancers.

The duties will include: DNA and RNA preparation and manipulation, Southern and Northern blotting preparation and screening using cosmids and YAC genomic libraries, preparation and use of CDNA libraries. Also, isolation of cDNA libraries, construction of a genetic linkage map of chr3p, mapping the Von Hippel Lindau (VHL) gene by RFLP deteion analysis, haplotype analysis, somatic cell deletion/translocation hybrids, and genetic linkage analysis.

Ph.D. in chemistry or molecular biology with experience in protein chemistry and enzymology preferred. Knowledge of recombinant DNA technology, gene mapping, "reverse genetics" and/or cloning genes from a zero data base desired.

You will work in a campus-like setting in Frederick, Maryland, near Baltimore and Washington, D.C. Plus, PRI offers a salary commensurate with credentials and an attractive fringe benefits package. For consideration, please forward curriculum vitae in confidence by 15 February 1989 to: Barbara Norton-Gill, Technical Recruiter, Inc., NCI-FCRF, P.O. Box 8, Frederick, MD 21701.

An Equal Opportunity Employer, M/F.

**VETERINARY/MEDICAL ENTOMOLOGIST**

The Department of Veterinary Pathobiology, University of Illinois College of Veterinary Medicine announces a full-time, tenure-track assistant professor position in veterinary entomology. Applicants should have a D.V.M./Ph.D. or Ph.D. degree with experience in veterinary or medical entomology. Duties include development of a strong research program, participation in professional and graduate teaching, and contribution to diagnostic services as needed. Opportunities for collaboration in vector-borne diseases research exist within the department and in the Illinois Natural History Survey. Salary is negotiable. Inquiries and letters of application, including curriculum vitae and names of three references, should be submitted to: Dr. Uriel Kitron, Chair, Search Committee, College of Veterinary Medicine, University of Illinois, 2001 South Lincoln, Urbana, IL 61801; telephone: 217-333-6221. To receive full consideration, application must be received by 1 April 1989.

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

**ASSISTANTSHIPS**

**GRADUATE PROGRAM IN NEUROSCIENCE**

The Neuroscience Program at University Hospital at The Milton S. Hershey Medical Center of the Pennsylvania State University has assistantships available in August 1989. This interdepartmental program is designed to confer a Ph.D. degree with a major in neuroscience. Participating faculty have established research programs in molecular, biochemical, neuroanatomical, behavioral science, neurochemistry, neuropharmacology, neuroendocrinology, and cerebral blood flow and metabolism. Initial Wolfe recipients are encouraged to apply to: Dr. Robert B. Page, Director, Neuroscience Program, P.O. Box 850, Hershey, PA 17033. An Equal Opportunity/Affirmative Action Employer.

**TEACHING ASSISTANTSHIPS**

(Including tuition waiver for qualified applicants beginning September 1989. Graduate study leading to M.S. or Ph.D. with concentration in biochemistry, botany, ecology, marine biology, microbiology, molecular and cellular biology, physiology, or vertebrate biology. For information, contact: Dr. Richard L. Marsh, Graduate Coordinator, Department of Biology, Northeastern University, 360 Huntington Avenue, Boston, MA 02115. U.S. Northeastern University is an Equal Opportunity/Affirmative Action, Title IX Employer.)

**POSITIONS OPEN**


**EMORY UNIVERSITY**

**WOORDRUFF CHAIR IN MOLECULAR GENETICS**

Emory University announces the creation of an endowed chair: the Woorddruff Professorship in Molecular Genetics. An interdepartmental program in genetics exists in the Division of Biological Sciences and currently consists of over 25 faculty. Research interests represent most areas of modern molecular genetics encompassing a wide variety of systems ranging from the human to viral organisms and viruses, and there is considerable collaborative interaction among the faculty. The chair will be an independent unit reporting directly to the Dean of the School of Medicine and will include additional new faculty positions and an initial 5,000 square feet of newly constructed laboratory space in the new Science Center. The seed funds and salary. Investigators with active research programs capable of providing campus-wide leadership in research and training in this discipline, especially established investigators as well as those with unusual promise and a developing international reputation, are encouraged to apply. Submit applications or nominations by 15 February 1989 to: Woorddruff Molecular Genetics Search Committee, Emory University School of Medicine, 1440 Clifton Rd., NE, Atlanta, GA 30322.

An Affirmative Action/Equal Opportunity Employer.

**CALL FOR PROPOSALS**

The Adirondack Foundation invites the submission of PRE-PROPOSALS for projects involving innovative uses of microbial populations for a variety of research goals. The descriptive part of the pre-proposal should not exceed three pages and should include specific project aims, personnel and budget. None of the monies awarded are to be utilized for administrative overhead. A complete curriculum vitae of the principal investigator, including past funding history, must be included. After review, selected pre-proposals will be returned and full research proposals requested. The Foundation intends to award a number of small (normally $10,000 to $30,000) grants to a number of projects that may not be fundable through traditional sources. Deadline for submissions is March 1989. Send pre-proposals to: Dr. James Wright, Research Director, Adirondack Foundation, Jay, NY 12941.

**FELLOWSHIPS**

**PREDOCTORAL FELLOWSHIPS IN BIOMEDICAL AND PHYSICAL SCIENCES**

Applied Mathematics · Biochemistry · Biology · Biometrics · Biomedical Engineering · Biophysical Sciences · Biostatistics · Chemistry · Computer Science · Cell Biology and Anatomy · Environmental Health · Epidemiology · Genetics · Immunology · Materials Engineering · Microbiology · Medical Genetics · Medical Psychology · Microbiology · Molecular Cell Biology · Neuroscience · Nutrition Sciences · Pathology and Microbiology · Physiology · Physics · Psychological Optics · Physiology · Virology


**FELLOWSHIPS INSTITUTE OF ECOSYSTEM STUDIES SUMMER RESEARCH FELLOWSHIPS**

The Institute of Ecosystem (IES) will award one research fellowship for the duration of the summer 1989. Applicants should have a Ph.D. in conservation biology, and be interested in collaborating with a diverse group of researchers to study the influence of land use and fragmentation on landscape diversity.

Applications are invited from individuals interested in the following general areas: (i) soil and water quality; (ii) wildlife ecology; (iii) plant population biology; (iv) marine biology; (v) insect ecology; (vi) mammalian ecology; and (vii) an equal opportunity employer.

**FELLOWSHIPS FOR RESEARCH AND TRAINING IN ECOLOGY UNIVERSITY OF MICHIGAN BIOLOGICAL STATION**

14 June to 13 August 1989

Advanced undergraduate and graduate students with a Ph.D. may apply for fellowships in the Naturalist-Ecologist Training Program at the Biological Station in northern Michigan. All Geologists conduct independent ecological studies. Students enroll in one course of their choice and in another, Methods of Ecological Research. The latter course involves hands-on experience in the fundamentals of experimental research design, data management, statistical analyses, and the use of the computer. Stipends are based on field-based studies, but must be willing to advise and interact with students in the Program. Awards for students include tuition for home courses (ten graduate credits), fees, room and board. Recipients receive a $2,000 stipend, funds for equipment or supplies, fees, room and board, and an allowance for up to two dependents. For details and an application form, contact: Mrs. Mary J. Whitmore, University of Michigan Biological Station, Pellston, MI 49769. Applications must be received by 24 February 1989.

**GRADUATE STUDIES**

**PLANT AND FUNGAL MOLECULAR BIOLOGY**

Faculty with research interests in plant or fungal biochemistry, molecular genetics, physiology and development invite inquiries from qualified applicants for graduate study leading to advanced degrees in biochemistry and botany. Full tuition and stipend. Write: Dr. Robert C. Ullrich, Department of Botany, Life Science Building, University of Vermont, Burlington, VT 05405.

**TRAINING PROGRAM**

The Department of Pharmacology and Molecular Sciences and the Advanced Cancer Research Program at the Johns Hopkins University School of Medicine offer Ph.D. TRAINING PROGRAMS fostering innovative, interdisciplinary research in the following general areas: (i) protein and carbohydrate structure/function, (ii) molecular biology and gene regulation, (iii) parasitology and virology, (iv) immunology and antigen recognition, (v) neuropharmacology, and (vi) design, synthesis, and testing of new drugs. Stipends are available for qualified applicants. Interested individuals are encouraged to contact: Dr. Ernest Straus, Director, Advanced Cancer Research Training Program, Department of Pharmacology and Molecular Sciences, Johns Hopkins School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205. Telephone: 301-955-7117.

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