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Science and Creation: 
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the New Information Society 
Elizabeth L. Useem 
Are students in the U.S. developing the skills necessary for 
a high technology society, or will it be technological boom, 
educational gloom? Useem examines education in 
California’s “Silicon Valley” and Boston’s Route 128, two of 
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for the future. 
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Dorothy Nelkin 
Who controls research? A growing number of legal and 
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security needs of government and industry come into 
increasing conflict. 
1984, 130 pp., softcover; $10.00, AAAS members $8.00

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Reflections on the 
Recombinant DNA Controversy 
Edited by Raymond A. Zilinskas and 
Burke K. Zimmerman 
Questions of safety and ethics about recombinant DNA 
techniques continue to surface. This book takes a look at 
historical, political, industrial, scientific, and international 
aspects of these issues. The authors show how lessons 
learned from the experience can be used to cope with 
similar issues in the future. 
1986, 256 pp., hardcover; $24.95, AAAS members $19.95

All orders must be prepaid. VISA, MasterCard, and 
Choice accepted; include account number, expiration 
date, and signature.

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Dept. M, Washington, DC 20005. Please add $1.50 
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Association for the Advancement of Science

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Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no alterations are accepted after 2 weeks prior to date of issue in which ad appears. Also, personal lines are accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

LINE CLASSIFIED ADVERTISING DEADLINES:
Thursday, 10 a.m., 2 weeks prior to date issued (mail on due date).

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

LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth) $350 per line, $350 minimum, per week. Minimum charge covers one inch on a single column; one inch equals 10 lines of 52 characters and spaces per line. No charge for replies. No agency commission for ads less than 4 inches. No cash discount. Prepay required for all foreign ads. Purchase orders and/or cover letter including billing address required for all other advertising.

To ESTIMATE ad cost: Structure ad on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line space, and all parcel rates are included. The estimated cost of your ad (rounded off) is $350 per line. Ad titles located within the text are printed in boldface. Extra 52 lines of text are only 32 characters per line. In ESTIMATING the cost, multiply total lines x $350 = approximate cost of ad. This is an approximate cost only. Allow for variation between estimated lines and actual typeset lines of 52 characters and spaces. The resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.

CANCELLATION POLICY:
NOTICE: Send cancellation notice 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 (39 lines) to:
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1333 H Street, NW, Room 940
Washington, DC 20005
Telephone: 202-326-6555

Send copy for Fractional Display ads, 1/6 page and larger, and classified ads to:
Schersch Associates, Inc.
1515 Broadway
New York, NY 10036
Telephone: 212-720-1060

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

Positions Wanted


Ph.D. Biophysics (1986), 2 years of NRSA post-doctoral in biomedical pharmacology with teaching experience in neuroscience/psychology. Research in opioid, serotonin receptor pharmacology, neural/behavioral mechanisms of reward and depression and regeneration. Seeks assistant professorship with commitment to teaching and research. Box 197, SCIENCE.

Physiologist, M.D. Research experience in nephrology (hypertension, endocrinology). Clinical experience in general internal medicine. Teaching experience in medical physiology. Box 188, SCIENCE.

Virology/Immunology, Ph.D. Thirty years of pharmaceutical industry R&D experience; developing human vaccines, other biological products. Planning, implementing clinical protocols to support licensing of new products, with statistical analysis, publication of results. Laboratory director, contract management. Seeking consulting arrangement/professional assignments in areas of experience. Box 199, SCIENCE.

Positions Open

ACADEMIC FACULTY POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY
MAYO MEDICAL SCHOOL, AND MAYO GRADUATE SCHOOL OF MEDICINE

Department of Biochemistry and Molecular Biology seeks applications for a faculty appointment at the associate, assistant, or full professor level, depending on qualifications. Preference will be given to outstanding molecular and developmental biologists with demonstrated expertise in somatic cell and germline gene transfer techniques. Highly qualified individuals with other molecularly oriented research interests are also encouraged to apply. The Mayo Clinic offers an outstanding research environment in a medical and academic setting. Send curriculum vitae, statement of research interests, and names of three references by 15 February 1988 to: Dr. Michael J. Gets, Chairman, Search Committee, Department of Biochemistry and Molecular Biology, Mayo Clinic/Foundation, Rochester, MN 55905, An Equal Opportunity/Affirmative Action Institution.

ADJUNCT ASSISTANT PROFESSOR—Assistant research professor to initiate or continue independent research program in any area of molecular or cellular physiology. Active, well-equipped department will provide space, start-up funds. Reply to: Harvey R. Weiss, Ph.D., Acting Chairman, Department of Physiology and Biophysics, Box Wood Johnen Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. Equal Opportunity/Affirmative Action Employer. MUIFHV.

Concordia University, Department of Biology, invites applications for a tenure-track position in microbiology, at the ASSISTANT PROFESSOR level. The successful candidate will have had at least 2 years of post-doctoral experience in research and must be able to develop an independent research program. Duties will include developing a course in biotechnology, participation in undergraduate teaching, supervision and evaluation of graduate students. Applications are considered until the position is filled, and appointment will be effective September 1988. Send curriculum vitae, a brief description of your research interests, and the names and addresses of three references to: Dr. E.J. Maly, Chairman, Department of Biology, Concordia University, 1455 de Maisonneuve Blvd. West, Montreal, Quebec, H3G 1M8. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Subject to final budgetary approval.

ASSISTANT PROFESSOR: To perform research and instruct students in immunology of herpes viruses and human immunodeficiency virus with an emphasis on antibody responses and immune responses. Responsibilities include development of advanced research programs involving model systems and animal models of herpes viruses and human immunodeficiency virus in natural history of genital herpes, AIDS, and development of rapid diagnostic methods. Potential future tenure-track consideration. Requires Ph.D. and a minimum of 5 years of experience in virology and/or immunological research in areas of current research. A substantial publication record required. Contact: Dr. J. Maly, Director of Division of Infectious Diseases and Immunology, Department of Pediatrics, Emory University School of Medicine, 69 Butler Street, S.E., Atlanta, GA 30303. Applications due before February 1988. Emory University is an Equal Opportunity/Affirmative Action Employer.

MICHIGAN STATE UNIVERSITY DEPARTMENT OF ZOOLOGY

The Department of Zoology announces a tenure-track position at the ASSISTANT PROFESSOR level in the area of Developmental Biology to begin 1 September 1988. The Department is particularly interested in applicants working in the role of the postdoctoral experience. Applicants should have a strong commitment to assist in the teaching of comparative developmental morphology and in design and teach an advanced course in their specialty. The applicant will be expected to maintain an active, externally funded research program. Applicants with postdoctoral experience are preferred. Applicants for the position should submit a curriculum vitae, statement of teaching and research interests, and have four letters of reference sent to:
Developmental Biology Search Committee
Department of Zoology
204 Natural Science Building
Michigan State University
East Lansing, MI 48824-1115

Applications should be submitted by 15 February 1988. Michigan State University is an Affirmative Action/Equal Opportunity Employer.

California State University, San Bernardino invites applicants for a tenure-track position in the Department of Biolo- gy, available September 1988. Appointment is at the rank of ASSISTANT PROFESSOR ($27,588 to $38,136) based on experience. We offer I.A., B.S., and M.S. degrees in biology. Qualifications: Ph.D. in cell biology with expertise in neurophysiology and toxicology. Deadline is 15 January 1988. Submit letter of application, curriculum vitae, and three letters of recommendation to: Dr. Sarojam R. Mankau, Chair, Department of Biology, California State University, 5800 University Parkway, San Bern- dono, CA 92407. An Equal Opportunity/Affirmative Action, Section 504, Title IX Employer.

ASSISTANT PROFESSOR: Developmental Neuro- biology, tenure-track, Ph.D., fall 1988 to teach general biology and advanced courses in area of specialty, with commitment to research with participation in mas- ter's program. Send resume, three letters of recommen- dation, transcripts, and short statement of teaching/research goals to: Dr. James R. Toepfer, Chair, Faculty Search Committee, Department of Biological Sci- ences, Youngstown State University, Youngstown, OH 44555 by 31 January 1988. Affirmative Action/ Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY. The Department of Biology at Hiram College invites applications for a full-time, tenure-track faculty position to begin 1 September 1988. A Ph.D. and teaching experience are required. We are looking for a plant scientist with major experience in molecular and cellular biology. Additional qualifications would include experience in curricular development and supervising teaching assistants. Responsibilities include courses in introductory biology, plant physiology, plant molecular biology, and possibly genetics, microbiology, and cell biology. Other responsibilities include academic advising of students, working on committees, and directing undergraduate research projects. Send curriculum vitae, a letter describing your background and interests, three letters of recommendation, and undergraduate and graduate transcripts to: William Laughner, Chair, Bioiology Department, Hiram Col- leges, Hiram, OH 44234 by 1 March 1988. Hiram College is an Equal Opportunity Employer.

1 January 1988
POSITIONS OPEN

Two tenure-track ASSISTANT PROFESSOR positions begin August 1988; Ph.D. or equivalent required. One position for a vascular plant taxonomist using biochemical methods in research. The position will also have responsibility for the departmental herbarium. The other position is for a cellular biologist with expertise in immunology. Both candidates will be expected to teach in a multisection general biology program, complement existing courses in molecular and cellular biology and undergraduate research, and seek extramural support. Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references by 5 February 1988 to:

Dr. J. A. Butts, Chairperson
Department of Biology
Appalachian State University
Boone, NC 28608
Telephone: 704-262-3025

ASU is an Equal Employment Opportunity/Affirmative Action Employer.

HARVARD MEDICAL SCHOOL
ASSISTANT PROFESSOR OF GENETICS/MOLECULAR BIOLOGY

The Department of Genetics at Harvard Medical School is seeking a candidate for the assistant professor level for September 1988. Research laboratories will be located in the Department of Molecular Biology at Massachusetts General Hospital in Boston. Major support, including laboratory space, equipment, and secretarial support will be available through the Department of Molecular Biology. The Department of Genetics is building a strong research program in the area of molecular genetics with an emphasis on teaching genetics to both graduate and medical students. We are interested in candidates conducting research in any area of molecular, developmental or structural biology. Applicants should have a strong background in molecular genetics research including significant postdoctoral training.

Applications should be submitted, prior to 1 March 1988, curriculum vitae, reprints, statement of research interests, and letters from at least three references to: Dr. Howard M. Goodman, Department of Molecular Biology, Massachusetts General Hospital, Boston, MA 02114.

Harvard University/Massachusetts General Hospital are Equal Opportunity/Affirmative Action Employers. Qualified women and minority group members are encouraged to apply.

ASSISTANT PROFESSOR OF NUTRITION
TWO TENURE-TRACK POSITIONS: 9-month, full-time, tenure-track, to conduct research and teach human nutrition. One position will deal with nutrition/genetic interactions and the other with nutrition and development. Ph.D. in human nutrition or related area is required. R.D. and postdoctoral or clinical experience are desirable assets. Salary commensurate with experience. To apply, send application letter, curriculum vitae, and names of references by 1 February 1988 to: Dr. M.T. Atallah, Department of Food Science and Nutrition, University of Massachusetts, Amherst, MA 01003. An Affirmative Action/Equal Opportunity Employer.

The Department of Neurosciences, University of California, San Diego is seeking qualified applicants for a position as ASSOCIATE RESEARCH NEUROSCI-ENTIST. The successful candidate will have at least 2 years of postdoctoral experience in biochemistry, and will be expected to pursue independent research projects in the area of biochemical studies of neuronal proteins. Applicants should have a strong hidden testimony of Alzheimer's disease. This position will be filled with a person with demonstrated experience in the areas of neurochemistry, molecular biology, and histochemical studies of Alzheimer's disease. Applications received on or before 1 March 1988 will receive full consideration. Send curriculum vitae, names and addresses of five references, and brief description of your research objectives and interests to: Dr. Robert Katzung, Depart-ment of Neurosciences, M-024, University of California, San Diego, La Jolla, CA 92039. The University of California is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, PATHOLOGY
TENURE-TRACK POSITION BEGINNING AUGUST 1988

Tenure-track position beginning August 1988. Ph.D. degree required with postdoctoral experience favored. The individual should have research experience in molecular biology or biochemistry in conjunction with micro- biological or virological expertise. It is expected that the candidate will develop an active research and graduate program dealing with molecular mechanisms of pathogenesis of medical or agricultural interest. Experience in research collaboration in the clinical laboratories of the Department of Pathology and/or experience in general microbiology. A commitment to excellence in research and teaching is required. To assure full consideration, send curriculum vitae, statement of research goals, and the names of three references by 5 February 1988 to:

Dr. Glenn Todd, Head, Department of Pathology and Microbiology, Oklahoma State University, Stillwater, OK 74074. Oklahoma State University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF SURGERY—The Orthopaedic Surgery Section is seeking an assistant professor to coordinate research activities and develop the basic science curriculum for orthopaedic residents. The successful candidate will possess a Ph.D. in, e.g., biomedical/biomedical engineering and experience in tissue culture, bioengineering and/or instrumentation determination. Familiarity with bone and soft tissue biology, bulk and surface properties of bio-ceramics/metals/polymers and their degradation and the design of bone repair is a must. The group's research interests include joint replacement, remodeling and repair of bone; tendon and ligament repair/replacement. Send curriculum vitae and three references by 5 February 1988 to: Joseph F. Zawatzky, M.D., Professor and Chief, Orthopaedic Surgery, UMDNJ—Robert Wood Johnson Medical School, One Robert Wood Johnson Place, CN 19, New Brunswick, NJ 08903-0019. Equal Opportunity/Affirmative Action Employer. MI/HH/IV.

ASSISTANT PROFESSOR/VETERINARY SCIENCE

The Institute of Arctic Biology and the Department of Biology, University of Alaska Fairbanks invite applications for a tenure-track faculty position in veterinary science. Major emphasis: development of appropriate research programs, secondary emphasis: teaching of undergraduate and graduate courses. Supervision of graduate students is expected. Supervise animal facilities and staff and ensure institutional compliance with applicable animal welfare regulations. D.V.M. required. Board qualifications in laboratory animal science or other specialties. Licensed (or eligible) to practice veterinary medicine in the State of Alaska. Ph.D. in veterinary or veterinary-related biomedical or related discipline required. Salary: $36,600. Preference will be given to candidates with outstanding academic achievements and/or experience in research and teaching. Send curriculum vitae and undergraduate transcripts, and titles of papers before 5 February 1988 to: Dr. Edward C. Murphy, Chairman, Search Committee, Veterinary Science Position, Institute of Arctic Biology, 215 Irving Boulevard, University of Alaska Fairbanks, Fairbanks, AK 99775. Telephone: 907-474-7154. The University of Alaska is an Equal Opportunity/Affirmative Action Employer. The University of Alaska is committed to a multicultural student body and encourages applications from women, minorities, and persons with disabilities.

ASSISTANT PROFESSOR. PHARMACOLOGY

UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

TENURE-TRACK AT AUGUST 1988

The Department of Pharmacology seeks candidates with demonstrated excellence in their postdoctoral training and a background in pharmacology, or a relevant science. The scope of expertise sought is purposefully broad and includes molecular, cellular, or receptor biology, chemistry of macromolecules, electrophysiology, drug metabolism, toxicology, and environmental health science. The successful candidate will be expected to conduct a vigorous research program and participate in the education of medical and graduate students.

Send, by 1 March 1988, curriculum vitae, a statement of research interests and goals, and names, addresses, and telephone numbers of three references to:

Neal C. Brown, Chair
Department of Pharmacology
University of Massachusetts Medical School
Worcester, MA 01655
An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE PROFESSOR OR PROFESSOR OF PSYCHIATRY

Board-eligible or Board-certified psychiatrist. Teaching and clinical responsibilities and research opportunities. Send curriculum vitae and references to:

Javier Escobar, M.D.
William Shaw, M.D.
Department of Psychiatry
University of Connecticut Health Center
Farmington, CT 06032
An Affirmative Action/Equal Opportunity Employer. MI/WH

ASSOCIATE PROFESSOR OR PROFESSOR OF PATHOLOGY

The Department of Medicine, University of Toronto, has an opening for an ASSOCIATE PROFESSOR OR RESEARCH ASSOCIATE. The candidate should have a Ph.D. (M.D./Ph.D.) in the field of renal physiolo-gy or pathophysiology. A minimum 2 years of postdoc-toral experience is required. The candidate will be ex-pected to develop an independent research program that will be working in close association with a basic research memory laboratory. Experience in the area of arthritis research will be considered. Qualified candidates should send a curriculum vitae, a one-page research outline and a brief outline of research plans by 1 February 1988 to:

Dr. Philip Osoby, School of Dental Medicine, Washing-ton University, 4559 Scott Avenue, St. Louis, MO 63110.
ASSOCIATE EDITOR
SCIENCE MAGAZINE

Editorial position available for a PhD biochemist or molecular biologist with two or three years of research experience and specific capability in one or more of the following areas: protein structure and function, enzymology, cell biology, or immunology. We are seeking someone with wide general interest in quantitative aspects of the life sciences and publications in the refereed literature. Editors have wide 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 with cover letter including salary requirements to:

Ms. Carolyn Bell
AAAS
1333 H Street, NW
Washington, DC 20005

EOE

RESEARCH SCIENTISTS

Telios is a new and growing pharmaceutical company strategically focused in developing synthetic and recombinant extracellular matrix components into an exciting portfolio of human therapeutic products. Telios is located near the University of California at San Diego and in close proximity to a number of prestigious medical and research institutes. We offer the opportunity to join the company during its organizational stages and participate in the challenging job of building a successful company. We are seeking senior level scientists, recent PhD’s with postdoctoral experience and technicians in the following areas:

Animal Physiologist and Pharmacologist to establish model systems to study the efficacy of our drugs in wound healing, chemotherapy, cardiovascular and other applications.

Cell Biologist to study peptide / receptor interactions and develop cell-based models to optimize the biological activities of selected peptides.

Peptide Chemist to aid in the design and synthesis of novel peptides and conjugates and to manufacture candidate drugs for clinical trials.

Molecular Biologist to engineer and express synthetic genes for novel extracellular matrix proteins and receptors.

Analytical Chemist to devise test methods and quality control procedures for the drug manufacturing procedures.

Please send your CV, bibliography and references to:

Telios Pharmaceuticals, Inc.
Director of Personnel
2909 Science Park Road
San Diego, California 92121
ASSISTANT/ASSOCIATE PROFESSOR
UNIVERSITY OF ILLINOIS
AT CHICAGO
COLLEGE OF MEDICINE

The Department of Biological Chemistry is seeking applications for a position at the assistant or associate professor level. We seek an outstanding researcher with a record of significant scientific accomplishment, who is also an outstanding teacher at the graduate level. Our Department consists of approximately 70 faculty members and 150 graduate students. Applications from women and minorities are encouraged. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

ASSOCIATE PROFESSOR
MOLECULAR-CELL BIOLOGY

Applications are invited for a tenure-track position beginning July 1988. Candidates are expected to conduct independent extramurally funded research in contemporary molecular-cell biology. Experience in TEM, SÉM, and immunochemistry are highly desirable. Teaching responsibilities include participation in the coordination of an interdisciplinary graduate course in molecular-cell biology for students in anatomy and other basic science disciplines. Special ability will be given to applicants capable of teaching molecular concepts and information to the cell and tissue levels of the organism. Applications should be accompanied by a curriculum vitae, a statement of research and teaching interests, and in accordance with the University of Illinois's affirmative action policy, three letters of recommendation should accompany the application. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

ASSOCIATE RESEARCH SCIENTIST POSI-
TION available for molecular biologist or a biochemist/ cell biologist to join a basic atherosclerosis research laboratory studying the regulation of growth factor expression in mononuclear cells. A Ph.D. or M.D. degree is required. Funding via NIH-SCOR grant. Send curriculum vitae and arrange for three letters of recommendation to: Dr. M. Panjwani, Department of Pathology, Medical University of South Carolina, 630 West 168th Street, New York, NY 10032. An Equal Opportunity/Affirmative Action Employer.

BIOCHEMISTRY SENIOR RESEARCH TECH-
NICIAN—Challenging opportunity for individual to assist in conducting research in nitric oxide chemistry, gas chromatography, HPLC, radiolabor, and other related duties. Selected candidate will have a B.S. and 1 to 2 years of experience in a biochemistry lab. Experience in basic acid isolation and sequencing preferred. Please send résumés to: Dr. P. Panjwani, Department of Ophthalmology, Box 450, Tufts University School of Medicine, Boston, MA 02111. An Affirmative Action/Equal Opportunity Employer.

BIOENGINEERING AND PRODUCT LINE MANAGER: Pennsylvania manufacturer of medical monitoring instrumentation seeks an Engineer responsible for new and improved Product Line Manager with new product and market development experience. To arrange a local interview, call: Wallingford, CT, (203) 234-1155, Monday to Friday, 12:00 noon to 8 p.m. EST.

BIOTECHNOLOGY PATENT ATTORNEY

Corporate group of New York metropolitan area biotechnology company has created the need for an additional attorney seeking a fast-paced informal envi-
ronment. Substantial background in molecular biology or related field and a minimum of 2 to 3 years of legal experience is required. Please submit in complete confidence to: Box 1, SCIENCE.
NEW
MULTIDEPARTMENTAL GRADUATE PROGRAM
IN CELL AND MOLECULAR BIOLOGY

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

BAYLOR COLLEGE OF MEDICINE has created a new graduate program of CELL AND MOLECULAR BIOLOGY stressing basic research in the above areas. Students accepted for studies leading to the Ph.D. will receive financial support. For further information contact

Dr. Savio Woo, Director
Graduate Program in Cell and Molecular Biology
Baylor College of Medicine
One Baylor Plaza
Houston, Texas 77030

Ph.D Research Pharmacologist
Immunoscience Division

The growing $4 billion success of Abbott Laboratories is due in part not only to aggressive R&D but also to the exceptional management for which we've won considerable recognition. These strengths extend to our Pharmaceutical Products Division, where we now seek a scientist to conduct research aimed toward discovering novel pharmaceuticals for the treatment of inflammatory and allergic diseases.

Candidates will have experience in studying Leukotrienes and other lipid mediators. Knowledge of hypersensitivity and lung physiology essential. Ph.D in Physiology or Pharmacology, with 2-5 years post-doctoral experience required. Must have ability to supervise a technical staff.

In addition to a stimulating professional and scientific environment, Abbott provides excellent salaries and full benefits including profit sharing and stock retirement plans. We are headquartered in a beautiful suburban area just 30 miles north of Chicago. For confidential consideration, please send your resume with salary history to: Patricia Handy/Corporate Placement, Dept. SCI 1/1. Abbott is an Affirmative Action Employer.

ABBOTT
ABBOTT PARK IL 60064
"Health Care Worldwide"
ASSISTANT OR ASSOCIATE PROFESSOR: A tenure-track position will open at the University of Virginia for an established CARDIOVASCULAR INVESTIGATOR, beginning 1988. The primary responsibility will be in cardiology with a joint appointment available in physiology where cardiovascular research is emphasized. Special consideration will be given to applicants who have obtained strong electrophysiological or molecular biological techniques to the study of cardiac or vascular function. Candidates should send curriculum vitae and a one-page proposal of anticipated research directions to: Dr. George Beller, University of Virginia Medical Center, Box 158, Charlottesville, VA 22908. An Affirmative Action/Equal Opportunity Employer.

CELL BIOLOGIST M.D. OR Ph.D. Postdoctoral or junior faculty level. Expertise in morphologic techniques and interest in endocrinology. To develop independent research program, help direct GI morphology laboratory, and interact with multidisciplinary group of basic-clinical investigators of the Department. Send curriculum vitae, bibliography, and three references to: N. E. LaRusso, M.D., Professor of Medicine and Associate Professor of Biochemistry and Cell Biology, Mayo Clinic and Medical School, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Institution.

CHAIRMAN UNIVERSITY OF TORONTO MOLECULAR GENETICS

The University of Toronto, Faculty of Medicine, is seeking applicants for the position of PROFESSOR AND CHAIRMAN in the Department of Medical Genetics. Applications are invited from established and distinguished scientists (Ph.D. and/or M.D.) with international reputations working in the field of molecular genetics, with demonstrated leadership and administrative skills, to lead a vigorous and diverse department with research programmes in eukaryotic and prokaryotic molecular genetics, human genetics, structural biology and developmental biology. Applications are particularly encouraged from individuals with a major commitment to basic science and to the molecular and genetic dissection of human genetic problems. The Department has active programs in both undergraduate and graduate research and teaching and is approximately 40 faculty members and 100 graduate students in a vibrant laboratory space at the University, the Hospital for Sick Children Research Institute, and the Mt. Sinai Hospital Research Institute. The position is available as soon as possible, with salary commensurate with qualifications and experience. The University of Toronto encourages applications from men and women to apply for this position. Encouraged applications should be addressed to: Dr. M. J. Hollenberg, Search Committee Chairman, Office of the Dean, Faculty of Medicine, University of Toronto, 160 College Street, Toronto, Ontario, Canada M5S 1A8.

In accordance with Canadian Immigration requirements, priority consideration will be given to Canadian citizens and permanent residents of Canada.

BIOSTATISTICAL CONSULTANT

Humana Inc. seeks applicants for a newly created position at corporate headquarters in Louisville, Kentucky. This is an exciting opportunity to design the broad range of data analysis responsibilities. These include: providing design and statistical services to the clinical research philippines; maintaining data quality at a high level; providing statistical analyses and generating reports; and assisting in the design and evaluation of clinical trials. This position requires a minimum of 3 years experience in clinical research, including the statistical component. Excellent interpersonal skills, computer experience, and enthusiasm are also essential. Humana Inc. is an Equal Opportunity Employer. Interested applicants should send resume to: Human Resources, P.O. Box 1438, Louisville, KY 40201.

CHEMISTRY POSITION

Ferris State University invites applications for a tenure- track position for teaching undergraduate biochemistry for September 1988. Duties will include teaching lecture and laboratory courses in biochemistry and participation in a biotechnology program. A Ph.D. is required and applicants must have a strong commitment to excellence in undergraduate teaching. Applications should be sent to: Dr. Marvin Loquist, Head, Physical Sciences Department, Ferris State University, Big Rapids, MI 49307. Deadline for applications is 1 February 1988.

An Equal Opportunity Affirmative Action Employer.

CHIEF OF MEDICINE

ROSWELL PARK MEMORIAL INSTITUTE

BUFFALO, NEW YORK

The Roswell Park Memorial Institute is seeking a Chief of Medicine who will have responsibilities for the direction and administration of oncology and medical support services.

The candidate must be Board-Certified in internal medicine and have strong qualifications as an established research investigator in oncology and substantial academic credentials in order to qualify for appointment as associate professor or professor at State University of New York at Buffalo School of Medicine. Apply by sending curriculum vitae to: Andrew A. Gage, M.D., Director, Institute Director, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, NY 14263. RPMI is an Equal Employment Opportunity Employer.

COMPUTER SPECIALIST, BIOLOGIST OR MATHEMATICIAN, GS-11/12/13, Crop Science Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Mississippi State, Mississippi. Incumbent serves as team leader for expert system knowledge engineering and support in the Insect Modeling Project. Responsible for defining appropriate methodological development, systematic approach to organize system components, external communication, and incorporating information into a computer-based system. Responsible for developing new AI methods to enhance, synthesize, and automate data on crop production systems. Must be a U.S. citizen. Salary $21,172 to $38,727 based on qualifications and experience. B.S./M.S./Ph.D. Usual or equivalent Federal Government benefits apply. For further position information: Dr. Terence L. Wagoner, 601-323-2230. For application procedures: Darlene Fowler: 301-344-1508. Applications should be sent to: Administrative Assistant No. 8-S-005 and be sent to: Darlene Fowler, USDA-ARS, Personnel Operations Branch, BARC-East, Building 417, Beltsville, MD 20705 by close of business 25 February 1988.
Opportunities in Biotechnology

Repligen is a leader in the application of biotechnology to the health care and personal care markets. We are currently developing an AIDS vaccine, products for the treatment of infectious diseases, cancer therapies, and novel biocompatible personal products. We take pride in the high caliber of our scientific staff and collaborations with major research institutions and corporate partners in Europe and the United States. The expansion of several of our R&D efforts has created the following opportunities:

**Immunology**

Research Scientist, 300-30. PhD + 0-4 yrs. experience in Immunology. Experience in cell mediated immunity and/or lymphokine research preferred.

Successful candidates will participate in research on therapeutic and vaccine products for AIDS. They will assist in planning and coordinating preclinical development of several recombinant therapeutic products.

**Molecular Biology**

Principal Investigator/Research Scientist, 400-31. PhD with 2-5 yrs. experience. Successful candidates will possess an exceptional record of achievement and have proven program management skills, and milestone planning.

Research Associate, 200-9/26. MS/BS with 2-4 yrs. experience.

Applicants must have skills in genetic engineering, gene cloning, DNA synthesis, DNA sequencing, or protein expression.

**Protein/Peptide Chemistry**

Research Associate, 200-12. MS/BS in Biology, Chemistry or related fields.

Successful candidate will have a working knowledge of chemical and enzymatic procedures for protein fragmentation as well as experience with HPLC analysis of peptides. Additional understanding of protein modification or immobilization is a plus.

Research Technician, 100-27. BS in Biology, Chemistry or related fields.

Protein purification experience and a working knowledge of HPLC is desirable.

Repligen Corporation offers a competitive salary, excellent benefits and equity participation. Submit cover letter, resume and references to the Personnel Director, Repligen Corporation, One Kendall Square, Bldg. 700, Cambridge, MA 02139. (Please refer to job code number when replying.) An Equal Opportunity Employer.

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Postdoctoral Research Staff Members

Lawrence Livermore National Laboratory, located in the San Francisco Bay Area, is seeking four Postdoctoral Research Staff Members.

- Position requires recent PhD in cell biology, hematology, immunology, molecular biology or related area. Individual will participate in a multidisciplinary effort to separate fetal cells from maternal blood using fluorescence-activated cell sorting, determine the frequency of fetal cells in maternal blood and apply fluorescence in situ hybridization with chromosome-specific probes and image analysis to detect cytogenetic abnormalities. Questions may be directed to Dr. Joe Gray—(415) 422-5610.

- Position requires PhD with experience in molecular biology including cloning, sequencing and gene expression. Incumbent will collaborate on research problems which focus on development of molecular methods for detecting gene mutations, analysis of physiologically relevant germinal mutations and construction of a physical and genetic map of the human genome. Questions may be directed to Dr. H. Morgenweiser—(415) 423-0534.

- Position requires recent PhD in molecular biology, cell biology, biochemistry or related area. Individual will participate in a multidisciplinary effort on mammalian cell mutagenic analysis. Flow cytometry and cell sorting will be used to enumerate and select cultured erythroid cells mutated in the glycoporphin A locus after exposure to ionizing radiation. Cellular radiation sensitivity will be characterized, and the mutagenic changes will be categorized by Southern blotting and sequencing the glycoporphin A gene. Questions should be directed to Dr. Ronald Jensen—(415) 422-5709.

- Position requires a recent PhD in molecular biology, genetics, immunology, cell biology, or related area. The individual will participate in studies of the molecular nature of in vivo somatic cell mutation in humans and mice. Human and mouse lymphocytes with mutant hprt genes will be selected, and analyzed at the DNA sequence level to identify alterations that are diagnostic of prior mutagen exposures. Questions may be directed to Dr. Irene Jones at (415) 423-3626 or Dr. Pieter de Jong—(415) 423-8145.

We offer a highly competitive salary and benefits package. Send curriculum vitae to Earl G. Morelli, Personnel Operations Division, Lawrence Livermore National Laboratory, P.O. Box 808, L-725, Dept. KSC11802B, Livermore, CA 94550. An equal opportunity employer. U.S. citizenship required.
DIRECTOR, DIVISION OF \textit{Immunology}
\textit{CARE WESERN RESERVE UNIVERSITY (CWRU)}
\textit{SCHOOL OF MEDICINE AND UNIVERSITY HOSPITALS OF CLEVELAND}

The Department of Medicine, CWRU School of Medicine, invites applications and nominations for the position of Professor of Medicine and Director, Division of Endocrinology. Candidates should have demonstrated accomplishments in endocrine research preferably with emphasis on cell biology, molecular biology, hormonal receptor and signal transduction. Additionally, candidates must have an M.D. degree, clinical experience and an interest in medical education.

Responsibilities include a substantial faculty recruit- ment, academic leadership in the establishment of en- crine research programs, organization of endocrine clini- cal activities and participation in undergraduate medical education.

Applications and nominations should be accompanied by curriculum vitae, and three or more letters of recommenda- tion. The search committee will begin its review of applications soon. Position available September 1, 1988.

Send letter of application, curriculum vitae, and the names and addresses of three references to: Dr. John H. Hoffman, Chair, Department of Endocrinology, University Hospitals, 2274 Abington Road, Cleveland, OH 44106. An Equal Opportunity Employer.

DIRECTOR OF TOBACCO AND \textit{Health Research Institute UNIVERSITY OF KENTUCKY}

Applications and nominations are invited for the Directorship of the University of Kentucky Tobacco and Health Research Institute. The Tobacco and Health Research Program facilitates multidisciplinary research addressing tobacco and health issues. The Institute coordi- nates, conducts and administers programs through its laboratory and the University's colleges and departments. The Director is responsible for institute administration, program planning, and fiscal accountability. The Director oversees and guides technical and research support services. Qualifications include: Ph.D. or M.D., extensive tobacco and health related research, demonstrated administrative expertise, and academic experience. Salary is negotiable. Send letter of application and three letters of reference to: Dr. John P. Hobbie, Associate Director, Tobacco Research Institute, University of Kentucky, Lexington, KY 40506–0272. An Equal Opportunity Employer.

DIRECTOR OF \textit{Toxicological Sciences THE JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH}

The Johns Hopkins University School of Hygiene and Public Health is seeking a Director for the faculty in Toxicology. This individual should have an outstanding record of academic and professional accomplishment in the toxicological sciences. This young, talented, and dynamic faculty has recently been relocated into new research facilities and has pre- and postdoctoral training programs. Currently there are 4 postdoctoral and 34 graduate fellows. The program emphasizes the eight full-time faculty is in the areas of biochemical, molecular, oxygen radical, and metal toxicology; immunotoxicology, lung toxicology, chronic toxicology. Extensive interactive units with units in chemistry, bioinfor- matics, medicine, physiology, and pathology within the University is also ongoing. Direct inquiries including curriculum vitae and the names of three references to: Robert Fire- gerald, Associate Chairman, Department of Environ- mental Health Sciences, School of Hygiene and Pub- lic Health, 615 North Wolfe Street, Baltimore, MD 21205. An Equal Opportunity/Affirmative Action Employer.

DIRECTOR—\textit{DEVELOPMENTAL BIOLOGIST}

The College of Arts and Sciences of Widener University invites applications for a tenure-track position as assistant professor of Biological Sciences, beginning in September, 1988. Ph.D. is required. Undergraduate education is the primary emphasis of the position. Competence in commu- nicative and experimental skills are required. Appointment will begin 1 February 1988. Letters of application, complete curriculum vitae, and three letters of recom- mendation should be sent to: Robert Morris, Biology Department, Widener University, Chester, PA 19013.

The Ohio State University. DIRECTOR, Ohio Co- operative Extension Service AND ASSOCIATE DRAm, College of Agriculture. The Director and Associate Director are charged with the development and Extension Service, which includes programs in agriculture, home economics, community and natural resource develop- ment, and 4-H youth development. This person also has a variety of state, regional and national assignments. The Director reports to the Vice President for Agricul- tural Administration, and has administrative responsibil- ies for program development, finance, personnel, and operational policy.

An earned doctorate, demonstrated leadership and administrative capability are required. Experience in educa- tion, business, or government desirable. Salary com- pensate with qualifications and experience. Tenure and rank to be commensurate with qualifications and experience.

Send letter of application, curriculum vitae, and the names and addresses of three references to: Dr. David L. Zartman Ohio Cooperative Extension Service Ohio State University 2120 Fyffe Road, Room 100 Columbus, OH 43210 Application deadline: 15 January 1988. The Ohio State University is an Equal Opportunity Employer and applications will be accepted without regard to age, race, sex, religion, or national origin.

DIRECTOR, THE BUCK CENTER ON AGING

The Board of Trustees of the University of Iowa is seeking a Director for the newly created research insti- tute to be located in Marion County, California. The Center has been created as the result of a Court settle- ment and has an initial endowment equivalent to $500 million. The Center will conduct research on a wide range of subjects focused on aging, with multidisci- plinary approaches—such as biomedicine, medical, physi- cal, psychological and social policy—emphasized.

No direct clinical services will be offered. The Director should have a Ph.D. in an appropriate field of aging research and have demonstrated adminis- trative ability in a university, corporate, or hospital setting. A university administrative experience is anticipated. The Direc- tor must have the experience, vision, and energy neces- sary to guide the establishment of the Center on Aging in its formative years. The development of graduate and postdoctoral training in administrative researchers and of educational programs for the lay and professional community of Marion County as well as for health professionals throughout the world will form an impor- tant part of the Director's responsibilities.

Interested individual should contact: Mary K. McFadden, Associate Director, Buck Center on Ag- ing, P.O. Box 2279, Mill Valley, CA 94942, no later than 1 March 1988.

DIRECTOR: DNA DIAGNOSTIC LABORATORY

The Yale University Department of Human Genetics has a faculty position beginning 1 July 1988 for Director, a postdoc and a Ph.D. or M.D. BE/BC, American Board of Medical Genetics desirable. Responsibilities include supervising a service laboratory providing accurate, fast and reliable DNA diagnostic and genetic counseling services. Experience in Genetic counseling is an added advantage. An individual's clini- cal service will be an important part of the position. The individual's clinical role and opportunities for research will be tailored to interest and experience. Applicants should have demonstrated experience in research and carry out NIH-funded projects. Applicants should have a PhD or M.D. and Board certification in Genetics. Interested individuals should send curriculum vitae and names of two references to: Dr. Robert B. Trent, Director, Yale University Department of Human Genetics, Box 3333, New Haven, CT 06510, before 15 February 1988. The University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR—\textit{PHARMACEUTICAL SCIENCES CENTER}

The University of Kentucky seeks a Director for the Chemistry, Physics and Pharmaceutical Sciences Center (CFST), a multidisciplinary research center organized out of the College of Pharmacy but independently managed. The Director will be responsible for coordinating research opportunities and interests from colleges and Centers in order to form problem solving teams primarily in the areas of drug discovery, development and evaluation. Industry and research activities will be pursued with an emphasis on effective technology transfer and economic development.

The Director of the CPST will have a related academic appointment within the College of Pharmacy and should have credentials appropriate for a senior Pharma- cy faculty member. Qualifications should include a PhD. in pharmaceutical sciences and experience in both industrial and academic settings, as well as the ability to blend and work with many constituencies including academic, government and business leaders.

Send curriculum vitae and names of three references to: Dr. Henry Kosterlitz, Chair, CPST Search, College of Pharmacy, University of Kentucky, Lexing- ton, KY 40506–0862 by 29 February 1988. The University of Kentucky is an Equal Opportunity Employer.

DIRECTOR—\textit{INSTITUTE OF PHYSICAL RESEARCH AND TECHNOLOGY}

Iowa State University invites nominations and applications for the position of Director for the newly created Institute for Physical Research and Technology. The Director will be responsi- ble for the coordination of a major complex of existing centers and laboratories that conduct basic and applied research in the physical sciences and engineering, and for the development of new scientific enterprises of a similar nature. Base funding for the existing facilities is $26 million, and is expected to grow substantially in the future with the addition of new centers. Qualifications: Candidates should have: i) an understanding of federal, state and corporate financing of academic science; ii) a demonstrated ability to secure major research funding from a variety of sources; iii) a proven capacity to work effectively with university, government and industrial organizations; iv) experience in coordinating interdisci- plinary research; v) 5 to 10 years of relevant administra- tive experience in scientific administration. A Ph.D. in one of the physical sciences or engineering is preferred but not required. Available: 1 July 1988. Starting salary: Negotiable. Application: Interested persons should send a résumé and the names and addresses of three references to: Dr. K. Hoffman, Chair, IPT Director Search Committee, Department of Chemistry, Iowa State University, Ames, IA 50011. Nominations and applications should be received by 29 February 1988, in order to ensure full consideration. Iowa State University is an Equal Opportunity/Affirmative Action Employer.

ECOSYSTEMS ECOLOGISTS

The Ecosystems Center of the Marine Biological Lab- oratories is seeking applications for one or two new positions at the assistant, associate, or senior scientist/ professor level. Successful applicants will be expected to work collaboratively with a diverse group of terrestrial and aquatic ecologists. All applicants should have post- doctoral experience, with a broad background in ecosys- tem-level ecology.

Applications should send curriculum vitae, a short state- ment of research interests, and the names and addresses of at least three references to: Dr. John Hobbie, Direc- tor, Ecosystems Center, Marine Biological Labora- tory, Woods Hole, MA 02543. Applications will be accepted until 1 February 1988, or until a suitable candidate(s) is found. An Equal Opportunity/Affirmative Action Employer.

ECOSYSTEMS ECOLOGIST/PROJECT MANAGER

Postdoctoral position available with the NSF-funded \textit{Ecosystems} Program. Applicants are sought who can contribute to the project's goal of understanding the role of organisms in availability in agricultural systems and to manage daily operations of this large multidisciplinary research proj- ect. Requires training in ecosystem ecology or microbial ecology and plant/soil science and experience with 2 years of post-doctoral research. Send curriculum vitae and three letters of reference before 15 January 1988 to: Dr. G. P. Robertson, W. K. Keillogg Biological Station, Michigan State University, Hicko- ries Corners, MI 49060.

POSITIONS OPEN

CYTOGENETIC TECHNOLOGISTS

Positions open immediately for senior and/or supervisi- try technologies. Experience in prenatal diagnosis and/or cancer research. Excellent salary and benefits. Please call: 1-800-VIVIGEN or send résumé to: Kathy Richkind, Laboratory Director Vivigen 435 St. Michael's Drive Santa Fe, NM 87501
ECOTOXICOLOGIST

Exxon Biomedical Sciences, Inc. has an immediate opening for a qualified individual to assist in ecological and environmental hazard assessment. The successful candidate will have a Ph.D. in ecotoxicology or in an environmentally related field, with 0 to 2 years of postdoctoral experience in or a knowledge of the application of both effects and fate data to real-world concerns, as well as knowledge of regulatory requirements (CFR). An M.S. or Ph.D. in Biomedical Sciences is preferred. The candidate will perform both consulting and laboratory toxicology for affiliates around the world. Its resources include state-of-the-art toxicology, environmental chemistry, and mammalian toxicology laboratories. The candidate will perform as a study monitor and internal consulting toxicologist. Client interactions are an important aspect of our work, and thus, we are also seeking an individual who has excellent communication skills. Please forward résumé to:

Human Resources
Exxon Biomedical Sciences, Inc.
CN 2350, Mettlers Road
East Millstone, NJ 08875-2380

Equal Opportunity Employer MF/HV

ENDOCRINOLOGIST AND COMMUNITY ECOTOLOGIST/LIMNOLOGIST

M.I.T.

Two tenure-track positions are available, effective August 1988. We seek an endocrinologist and a community ecologist/limnologist. Ph.D. is required; postdoctoral experience is desirable. We seek applicants who will be effective in both teaching and research. The Department offers B.S., M.S. and Ph.D. programs, and is housed in new, well-equipped facilities. By 1 February 1988, send resume, three letters of recommendation, and transcripts of all academic work to: R. G. Sherman, Zoology, Miami University, Oxford, OH 45056. Minority and women are strongly encouraged to apply. Miami University is making every effort to create a diverse, heterogenous faculty and staff.

EUKARYOTIC CELL BIOLOGIST

Indiana University of Pennsylvania and the Biology Department invites applications for a tenure-track position at the assistant/associate professor level in eukaryotic cell biology starting fall 1988.

Qualifications: Ph.D. and should have teaching experience and a strong research record. Commitment to quality teaching and research is essential. Preference will be given to applicants with a specialty in the molecular biology of yeast.

Duties: Will include teaching undergraduate cell physiology and graduate courses, establishing a quality research program, and teaching department general course offerings.

Submit letter of application, résumé, undergraduate/graduate transcripts, statement of research, and three letters of reference to: Dr. William E. Dietrich, Jr., Cellular Biology Search Committee, Biology Department, Indiana University of Pennsylvania, Indiana, PA 15705. Application deadline is 1 February 1988. Minority applicants are encouraged to apply. IUP is an Affirmative Action/Equal Opportunity Employer.

EVOLUTIONARY BIOLOGIST

Indiana University of Pennsylvania and the Department of Biology invites applications for a tenure-track position in evolutionary biology at the assistant professor level starting fall 1988.

Qualifications: Candidates must have an earned doctoral degree and must have teaching experience and a strong research record. Preference will be given to applicants with a background in population genetics. Commitment to quality teaching and research is essential.

Duties: Will include teaching undergraduate and graduate courses, establishing a quality research program, and potentially advising graduate students.

Submit letter of application, résumé, undergraduate/graduate transcripts, statement of research goals and interests, and three letters of recommendation to: Dr. Arthur G. Hulse, Department of Biology, Indiana University of Pennsylvania, Indiana, PA 15705. Application deadline is 1 March 1988. Minority applicants are encouraged to apply. IUP is an Affirmative Action/Equal Opportunity Employer.

EVOLUTIONARY BIOLOGIST—The Department of Zoology at Southern Illinois University at Carbondale invites applications for a tenure-track assistant professor in evolutionary biology starting 16 August 1988. Applicants must have a Ph.D. degree; postdoctoral experience is preferred. The strongest candidates will have training in several aspects of evolutionary biology, with an emphasis on techniques of modern molecular biology, immunology, and model organisms. The successful candidate will be expected to establish a vigorous, externally funded research program and to teach courses/seminars in addition to participate in the general biology or zoology core curriculum. Demonstrated research in teaching, writing, publishing, and grantmanship is highly desirable. Send curriculum vitae, undergraduate, and graduate transcripts, one copy of each published paper, a statement of research interests and experience, and request and request at least three letters of recommendation to be sent to: Dr. Lee C. Drickamer, Chair, Department of Zoology, Southern Illinois University, Carbondale, IL 62901. Telephone: 618-536-2314. Deadline: 15 February 1988 or until the position is filled. SIUC is an Affirmative Action/Equal Opportunity Employer.

STANFORD UNIVERSITY

The Division of Applied Mechanics of the Department of Mechanical Engineering invites applications for a FACULTY POSITION. Desired is an individual with teaching and research interests in mechanics of deforma-

bility solids, including biomedical and related structures; in general, continuum mechanics, elasticity, mechanical and chemical and wave propagation.

The appointment is anticipated to be at the assistant professor level. Individuals with outstanding research and commensurate experience may be considered at the level of associate or full professor. Stanford University is an Equal Opportunity Employer and strongly encourages applications from interested minorities and women.

Applications should submit a résumé and a list of publications by 15 March 1988, to: Professor Charles R. Steele, Division of Applied Mechanics, Durand Building, Stanford University, Stanford, CA 94305-4040.

A full-time FACULTY POSITION (either M.D. or Ph.D.) in clinical neurophysiology is available at the Center for Clinical Neurophysiology (CCN), University of Pittsburgh Medical Center. The CCN provides a full range of evoked potential and evoked field diagnostic tests, ICU monitoring, and intra-operative monitoring procedures. The CCN emphasizes the development and application of new experimental approaches to clinical neurophysiology in a strong research environment.

The successful candidate will be expected to establish an independent research program. The appointment will be made at an academic level appropriate to the successful candidate. Reply to: Robert J. Slabassi, M.D., Ph.D., Director, Center for Clinical Neurophysiology, Department of Neurosurgery, University of Pittsburgh, Pittsburgh, PA 15260. Telephone: 412-647-5095.

UNIVERSITY OF PITTSBURGH DEPARTMENT OF BIOLOGICAL SCIENCES FACULTY POSITION

The Department of Biological Sciences at the University of Pittsburgh invites applications from highly qualified individuals with a strong research commitment for a tenure-track position at the level of assistant professor in one of the following research areas: Molecular genetic, cell and developmental biology, or molecular structure. This position offers an excellent opportunity for diverse interactions with an expanding group of investigators having current research strengths in the areas of protein-DNA interaction, eukaryotic gene expression, RNA structure and function, and aspects of cell and development biology. In addition to establishing a vigorous research program, the candidate will direct graduate and undergraduate research in the cell and developmental biology, or molecular structure position. Applications are invited from individuals with Ph.D. degrees or postdoctoral experience. Candidates are also encouraged to apply for a postdoctoral position at the degree level appropriate to the assistant professor position. Please send resume and research description to: Dr. Dr. M. Simon, c/o Employee Relations Dept., Room X13446, Nemours Bldg., DuPont Co., Wilmington, DE 19898. US Citizenship or permanent visa required. Equal Opportunity Employer MF/HV.

THE CLEVELAND CLINIC FOUNDATION

The Cleveland Clinic Foundation invites applications for a postdoctoral position with an emphasis on the opportunities in transplantation immunology. Essential qualities of the successful candidate are the ability to develop and initiate a research program bridging basic laboratory investigation with relevant problems in transplantation science, and a willingness to interact with basic scientists as well as transplant clinicians. Please submit a letter of interest, curriculum vitae, and research interests to:

Andrew C. Novick, M.D.
Chairman, Department of Urology

THE CLEVELAND CLINIC FOUNDATION

The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.
POSITIONS OPEN

FACULTY POSITION (non-tenure-track) to conduct research in the molecular biology of mycobacteria, especially the rapidly growing species. Proposed studies include: genetics of mercury and tetracycline resistance, genetic relatedness and function of mycobacterial plasmids, development of shuttle vectors for mycobacteria and mycobacterial transformation methodology. No teaching responsibilities. To join microbiology laboratory studying mechanisms of drug resistance in respiratory pathogens. Require Ph.D. in microbiology or molecular biology with 2 to 3 years of relevant research experience. Please submit curriculum vitae to: Richard Wallace, M.D., Chairman, Department of Microbiology, University of Texas Health Center at Tyler, P.O. Box 2003, Tyler, TX 75710.

FACULTY POSITION: The Hematopathology Program, Division of Laboratory Medicine, M. D. Anderson Hospital and Tumor Institute has a faculty position for a Ph.D. The candidate should have a strong background in molecular biology with an interest in hematopoietic neoplasia, in addition to a faculty position in diagnostic and operation and management of a diagnostic laboratory. The successful applicant will be expected to develop independent and collaborative research in hematopoietic neoplasia as well as assume responsibility for operation and management of a molecular diagnostic laboratory. Academic rank is commensurate with qualifications and experience. Send curriculum vitae, names of three references, and an interview request to: Sanford A. Staal, M.D., Division of Laboratory Medicine, Box 73, M. D. Anderson Hospital and Tumor Institute, 1515 Holcombe Blvd., Houston, TX 77230. The University of Texas System Cancer Center is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

Outstanding scientist in low temperature stable isotope geochemistry or biogeochemistry is sought for interdisciplinary research in earth sciences/ecology. Rank and salary open. Send statement of interests, curriculum vitae, and three letters of reference by 1 March 1988 to: Chairman, Search Committee, Department of Environmental Sciences, The University of Virginia, Clark Hall, Charlottesville, VA 22903. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

THE COLLEGE OF STATEN ISLAND (C.S.I.)

CITY UNIVERSITY OF NEW YORK FACULTY OPENING IN POLYMER CHEMISTRY

The C.S.I. Department of Chemistry is seeking polymer chemists to participate in its Ph.D. program and in the area of polymer chemistry. The position is open with regard to rank and area of polymer research. Candidates should be interested in actively pursuing outside grant support. Facilities for research include newly acquired instruments for FTNMR (solid-state 200 and 400 MHz), FTIR, thermal analysis, GPC, HPLC, osmetry. The College is scheduled to move to a new, 200 acre campus in 1992. Send curriculum vitae and names of three references by 1 March 1988 to: Dr. Richard Reacch, Dean of Science and Technology, The College of Staten Island/CUNY, Room I-501, 130 Staten Street, Staten Island, NY 10301. Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN NEUROBIOLOGY

DARTMOUTH MEDICAL SCHOOL

Dartmouth Medical School is expanding in the area of neuroscience through the establishment of the Center for Moleculare Cell Biology. As a component of this expansion, the Department of Biochemistry seeks a new faculty member with primary research interests in molecular and cellular neuroscience. The individual will be appointed at the assistant professor level and will participate in the teaching activities of the department. Applications should submit curriculum vitae, a statement of research interests and plans, and the names of three references to: Search Committee, Department of Biochemistry, Dartmouth Medical School, Hanover, NH 03756. Dartmouth Medical School is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN BIOCHEMISTRY

APPLICATIONS ARE INVITED FOR A TENURE-TRACK POSITION IN BIOCHEMISTRY. TO COMMENCE AS OF FALL 1988. A PH.D. IS REQUIRED, POSTDOCTORAL EXPERIENCE DESIRABLE. APPLICATIONS WILL BE CONSIDERED AT ALL RANKS. TEACHING RESPONSIBILITIES WILL BE PRIMARILY IN THE BROADCAST AND GENERAL CHEMISTRY Curriculum. Research specialization may be in any area of biochemistry including molecular genetics and bioseparation techniques. Applicants should submit curriculum vitae, names of three references, and copies of representative publications by 1 February 1988. The University of North Carolina is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN BIOLOGY

The Biology Department of Seattle University is seeking applications for a full-time, tenure-track position at the assistant professor level beginning in September, 1988. Seattle University is a metropolitan, Jesuit, teaching and research university enrolling annually approximately 3000 undergraduate and 1300 graduate students. Our department consists of five full-time faculty members, including one with a Ph.D. in biology. We are looking for an individual with a Ph.D. in a biological science with emphasis in comparative animal physiology and biology, psychology, with proven teaching ability or potential, and a strong commitment to undergraduate education. The teaching focus will include undergraduate courses in animal physiology, comparative embryology, vertebrate neurobiology, and ethology. The other courses to be included in the teaching responsibilities, such as general biology, biology of human sexuality, and endocrinology will be determined according to departmental needs and individual expertise. Application, including résumé, transcripts and list of references should be submitted by 1 February 1988.

Dr. David C. Brubaker, Chairperson
Department of Biology
Seattle University
Seattle, Washington 98122
206-296-5485
Seattle University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION—HUMAN TUMOR IMMUNOLOGY—MOLECULAR MECHANISMS

University of Wisconsin Department of Human Oncology seeks an assistant professor. Applicants expected to develop a strong independent research program and to participate in the regional Ph.D. training program. Send résumé and statement of research interests to: E. C. Borden, M.D., Chairman, Search Committee, Department of Human Oncology, University of Wisconsin Medical Center, 8440 N. Port Washington Rd., Milwaukee, WI 53226. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS—BIOLOGIST strong in ecology or physiology and interested in teaching introductory level courses and independent study. Applicants should submit curriculum vitae, a statement of research interests and plans, and the names of three references to: Search Committee, Department of Biophysics, University of California, Santa Barbara, CA 93106. The University of California is an Equal Opportunity/Affirmative Action Employer. Proof of U.S. Citizenship or eligibility for U.S. employment will be required prior to employment (Immigration Reform and Control Act of 1986).

FACULTY POSITION IN TROPICAL ECOLOGY

Applications are invited for a position in tropical ecology at the University of South Florida. A strong research background in one of the following areas is required: analysis and modeling of tropical forest ecosystems; ecological impacts of human activities on tropical ecosystems. The successful candidate will be expected to teach graduate and undergraduate courses in tropical ecology and participate in undergraduate teaching. Send current vitae, statement of research and teaching interests, and three letters of reference to:

Dr. Kristina Vogt
Yale University
School of Forestry and Environmental Studies
370 Prospect Street
New Haven, CT 06511
Deadline for receipt of applications is 15 February 1988 or until suitable candidates are found. The position will be available 1 July 1988.

Tale University is an Equal Opportunity Employer. Women and minority group members are encouraged to apply.

FACULTY POSITIONS

THE EYE RESEARCH INSTITUTE OF RETINA FOUNDATION

The Eye Research Institute is seeking a new faculty member at the assistant scientist level with interests in the following areas: retina, general cell biology, molecular genetics, development of retinal pigment epithelium, elaboration of extracellular matrix, or degeneration of the vitreoretinal interface and the vitreous body. Applicants should be in one or both of these areas. This position is expected to focus on glial cells and their role in the development and pathology of the retina. Research experience should include cell biology, physiology, or biochemistry. The Institute encourages collaboration with both basic scientists and clinicians researchers. Initial funding is available for salary and research costs. Curriculum vitae and letter of interest should be forwarded to:

Sheldon Rizney, M.D.
Search Committee
Eye Research Institute
20 Stanford Street
Boston, MA 02114

The Eye Research Institute is seeking an additional assistant scientist level Ph.D. cell biologist/microbiologist to join active eye research group. Specific areas of interest will involve corneal inflammation, ulceration and wound healing. Experience in cell culture, immunofluorescence, and monoclonal antibody techniques required. Salary commensurate with experience. Initial appointment at Harvard Medical School will be sought. Send curriculum vitae and reprints to:

Kenneth Kenyon, M.D.
Search Committee
Eye Research Institute
20 Stanford Street
Boston, MA 02114

Equal Opportunity/Affirmative Action Employer. M/F/V/H and others.
**TENURE-TRACK FACULTY POSITION IN MARINE SCIENCE**

The University of Alaska-Fairbanks, Institute of Marine Science is seeking applicants for a tenure-track faculty position in the general area of paleoceanography. The appointment will be with the Institute of Marine Science in the School of Fisheries and Ocean Sciences, and will involve research and graduate-level instruction and supervision. The Institute of Marine Science has a dynamic group of 22 faculty from various disciplines and about 35 graduate students. It is involved in a variety of research activities in arctic and subarctic seas. Many of these are multidisciplinary, and we wish to fill the position with a person committed to collaborative work with ongoing and future programs.

We are seeking applicants who have demonstrated expertise in applying their specialty to larger questions surrounding physical, geochemical and biological evolution of the deep oceans and continental margins. The successful applicant will be responsible for initiating, developing and executing an active research program relating to the marine stratigraphic history of the subarctic and arctic seas of Alaska.

Candidates must possess a Ph.D. in an appropriate discipline. We expect to fill this position at the Assistant Professor level, although a more senior appointment may be possible, depending on the applicant’s credentials.

Applications must be received by March 1, 1988. Applicants should send a statement of interest, a curriculum vitae and the names and addresses of three references to:

Dr. Sathy Naidu, chair  
Search Committee  
c/o Director’s Office  
Institute of Marine Science  
University of Alaska  
Fairbanks, Alaska 99775-1080

The University of Alaska is an EO/AA employer and educational institution. Your application for employment with the University of Alaska may be subject to public disclosure if you are selected as a finalist.

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**OPPORTUNITIES IN RESEARCH AND DEVELOPMENT**

**HEMATOLOGY MANAGER** - Ph.D. in Physiology or Biochemistry, ASCP(SA) desirable, minimum of 5 years industrial experience with blood bags and additive solutions.

**PROJECT MANAGER/TUMOR MARKERS** - Ph.D. in a Biological or Physical Science with at least 5 years industrial experience in the development of immunoassays. Successful product development to 510(k) and PMA approval. Experience in tumor marker assay development preferred.

**RESEARCH ASSOCIATES/EIA ASSAY DEVELOPMENT** - M.S. or B.S. in Biology/Chemistry. A bench associate level position requiring the candidate to have 2-3 years industrial experience in immunodiagnostic product development. Skills will include antibody selection and purification procedures, EIA reagent synthesis and qualification testing of assay kits.

**RESEARCH ASSOCIATE/TISSUE CULTURE** - M.S. or B.S. with a background in Cell Biology or Immunology. 2-3 years laboratory experience in tissue culture. Monoclonal antibody production, scale-up mammalian, cell culture production, ELISA/RIA technique and small animal handling required.

Terumo Medical Corporation, a leading medical device manufacturer, is seeking to expand its professional staff. In addition to liberal fringe benefits and competitive salary, we offer opportunity for growth with an expanding company. Send resume and salary history to:

**Personnel**  
c/o Dr. Fredric Simon  
Terumo Medical Corporation  
P. O. Box 605  
Elkton, MD 21921

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**Scientist Pharmacology**

We are seeking a Scientist to work in an endocrine group. This person would conduct animal studies to define the potential to control linear growth in humans. This would include working with growth hormone (GH), somatostatin, insulin-like growth factors, GH releasing factor, and binding proteins. A grounding in physiology is desirable, with further expertise in organ, cell or molecular biology. A Ph.D. and 2-4 years' postdoc experience or M.D. degree equivalent is required, with a proven record of scientific excellence and independent productivity.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume and 3 letters of recommendation to Sherrie C. Wilkins, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.
POSITIONS OPEN

Santa Monica College is recruiting for a full-time tenure-track FACULTY POSITION to teach Astronomy. This position is a master's degree or higher in astronomy, planetary or space science and a valid California Community College Credential. College level teaching experience in Astronomy and a current and valid California Community College Credential is preferred. Start date is 13 September 1988 with a salary range of $23,339 to $46,680, based upon academic preparation and teaching experience. District application must be received by March 1988. Contact: Santa Monica College, Office of Personnel Services, 1900 Pico Boulevard, Santa Monica, CA 90405. Telephone: 213-652-9386. Equal Opportunity Employer.

FACULTY POSITIONS

AT THE FRED HUTCHINSON CANCER RESEARCH CENTER
DIVISION OF BASIC SCIENCES

The Division of Basic Sciences at the FHCRC has faculty positions available (any rank). The Division is a broadly based, highly interactive group of 25 faculty members conducting research in cellular and molecular biology. Candidates will be selected primarily on the quality of their research, as opposed to specific topics, but the Division is structured in some specific areas including: structural biology, mammalian development, immunology, carcinogenesis, protein biochemistry, and population genetics. Interested individuals are invited to submit a curriculum vitae, a concise statement of their research plans, and three letters of reference to:

New Staff Committee
Fred Hutchinson Cancer Research Center
Division of Basic Sciences
900 Colubria Street
Seattle, WA 98104

on or before 31 January 1988.
The FHCRC is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS

DEPARTMENT OF BIOCHEMISTRY
SUNY/BUFFALO

Two tenure-track positions at the assistant or associate professor level are available in the Department of Biochemistry, School of Medicine, Dentistry and Pharmacy at the State University of New York (SUNY) at Buffalo. Applications in any area of biochemistry will be considered, however, applications are encouraged in particular from individuals whose research interests are in prokaryotic or eukaryotic gene expression regulation or in organic chemistry. The University has a well-documented history of success in the application of molecular biological techniques to their area of research. Responsibilities include developing a productive research program, participating in extramural funding, training Ph.D. candidates, and teaching undergraduate, graduate, and professional students. Applicants should submit curriculum vitae, a statement of research objectives, reprints and pre-prints, and have three letters of reference sent to:

Dr. Richard C. Condit, Chairman
Department of Biochemistry Search Committee
122 Cary Hall

SUNY at Buffalo, NY 14214

Deadline for applications is 29 February 1988.

Women, minority and handicapped scientists are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.

GENE EXPRESSION

The Laboratory of Molecular Endocrinology at the Massachusetts General Hospital seeks a POSTDOCTORAL FELLOW OR RESEARCH ASSISTANT to work on the regulation of polypeptide hormone genes. Experience in recombinant DNA techniques is preferable, but not essential. The laboratory is focused on studies of the cis and trans factors that lead cell-specific expression to polypeptide hormone genes. A biochemical facility for protein sequencing-synthesis and DNA synthesis is available. Salary and rank are commensurate with experience. Send curriculum vitae and two letters of recommendation to: J. Habener, Chief, Laboratory of Molecular Endocrinology, Massachusetts General Hospital, Boston, MA 02114.

HUMAN ANATOMIST

Applications are invited from candidates with the Ph.D., M.D. or equivalent degree and significant post-doctoral research experience for a tenure-track position at the assistant professor level beginning in fall 1988. The appointee will teach in a team-taught course in Gross Anatomy for anatomical students. The appointee must have demonstrated the potential for development of a productive research program in molecular or cellular neurobiology. Send curriculum vitae and the names of four references to: J. Habener, Chief, Laboratory of Molecular Endocrinology, Massachusetts General Hospital, Boston, MA 02114.

The "Zentrum für Molekulare Biologie" of the University of Heidelberg (ZMBH) offers

GROUP LEADER POSITIONS IN
MOLECULAR BIOLOGY

Applications are expected to have several years of post-doctoral experience in one of the major areas of molecular biology such as DNA-protein interactions, regulation of gene expression, developmental biology, viral and parasite research, and neurobiology. The positions are available for up to 5 years, and include the provision of lab space and access to central facilities of the institute as well as adequate basic and start-up funds. Successful candidates participate in the teaching program of the Max Planck Institute. Salaries are accorded to BAT Iva categories depending on age and experience. Applicants should submit curriculum vitae, bibliography, a short presentation of the prospective research program, and names of two references to: The Director, ZMBH, Im Neuenheimer Feld 282, D-6900 Heidelberg, FRG. Closing date: 15 January 1988.

HEAD, Division of Endocrinology: The Department of Pediatrics, Northwestern University Medical School, seeks candidates for the position of Head, Division of Endocrinology, based at The Children's Memorial Hos- pital, Chicago, IL. Applicants should have interests in teaching and patient care as well as substantial research accomplishments. A Ph.D. degree in molecular biology or a M.D. degree in pediatrics is required. The position is available upon completion of the training program. An Equal Opportunity Employer.

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE AND MEDICAL BIOTECHNOLOGY CENTER HUMAN MOLECULAR GENETICIST

The Division of Human Genetics, in conjunction with the University of Maryland Medical Biotechnology Center, is seeking a full-time, tenure-track investigator with expertise in mammalian DNA repair at the molecular level. The position requires a Ph.D., M.D. or equivalent degree in molecular biology or mammalian/human genetics with 2 years of relevant postdoctoral training and experience. Significant research accomplishment and the ability to obtain independent funding are essential. Activity will be focused on the identification, isolation, and characterization of genes associated with DNA repair in mammalian cells.

The Medical Biotechnology Center offers a creative and challenging scientific environment, with consideration given to opportunities for interaction with cellular and molecular biologists representing a wide diversity of interests.

Salary and academic rank are commensurate with qualifications and experience, and include a current curriculum vitae, a detailed statement of past experience, and a one-page description of future research plans and the names, addresses, and telephone numbers of three professional references. Send all applications to:

Maimon M. Cohen, Ph.D. Chief, Division of Human Genetics Acting Director, Molecular Biotechnology Center University of Maryland at Baltimore 655 West Baltimore Street, Suite 1-037 Baltimore, MD 21201

HUMAN NUTRITION: The College of Agriculture, Texas A&M University, is seeking candidates for tenure-track research and teaching positions at the ASSISTANT OR ASSOCIATE PROFESSOR rank. One position, a Ph.D. in nutrition, biochemistry or closely related field is required; an R.D. would be desirable. Research project should focus on human health. Second position requires a Ph.D. in nutritional genetics. Experience in nutritional genetics or biochemistry is required. Research project should have a molecular biology focus. Application or nominations are due by 1 March 1988. Send letter of application, curriculum vitae, and names and addresses of at least three references to: Dr. H. O. Kunkel, Dean, College of Agriculture, Texas A&M University, College Station, TX 77843. Telephone: 409-845-3714. Equal Opportunity Employer.
**Assistant or Associate Scientist**

Applications are sought to fill two tenure-track positions in the Department of Chemistry at the Assistant or Associate Scientist level. The openings are in the general areas of isotope chemistry (stable and/or radioisotopes) and the geochemistry of organic materials. Applicant should have a PhD, preferably postdoctoral experience, and a strong background in basic physical, organic, or analytical chemistry as applied to the study of chemical rates and processes in marine systems. Please send a letter of inquiry and curriculum vitae including a statement of research interest to:

Chairman Chemistry Department  
P.O. Box 54P

**WOODS HOLE OCEANOGRAPHIC INSTITUTION**  
Woods Hole, MA 02543  
An equal opportunity employer M/F/H/V

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**M ICROBIOLOGIST**  
**NATIONAL CANCER INSTITUTE**  
**NATIONAL INSTITUTES OF HEALTH**

The Biological Response Modifiers Program, DCT, is seeking a uniquely skilled professional with the creativity and know-how to direct an existing laboratory of 6-8 research technicians and postdoctoral fellows conducting basic studies of development of T cell function in vivo and in vitro.

The Biological Response Modifiers Program, DCT, is the Division's principal component involved in clinical and laboratory research to investigate, develop and bring to clinical trials potential therapeutic agents that may alter biological responses important in the biology of cancer growth and metastasis.

Applicants should have extensive expertise in developmental immunology and thymus function, be experienced in lymphokine research and applications of monoclonal antibodies in vivo, and be known as recognized experts in these areas, with an international reputation. The scientist we seek should have a Ph.D. or equivalent with substantial number of years of post-doctoral level experience and laboratory management experience.

Salary Range: $38,727 - $50,346 depending upon qualifications.

Location of Position: Building 10, National Institutes of Health, Bethesda, Maryland

Applicants must be U.S. citizen.

The National Institutes of Health is an Equal Opportunity Employer.

Applicants should contact:

Dan L. Longo, M.D.  
Associate Director  
BRMP, DCT, NCI  
Frederick Cancer Research Facility  
Building 567, Room 135  
Frederick, Maryland 21701-1013  
Telephone: (301) 698-1421

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NEW YORK, N.Y. 10036

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**Molecular Biology**

Smith Kline & French Laboratories, a leader in pharmaceutical research is seeking additional technical staff to expand its current research programs employing recombinant DNA technology in our suburban Philadelphia, PA facility.

The Department of Molecular Genetics is searching for individuals with B.S. or M.S. degrees in Microbiology, Biochemistry, Molecular Biology with experience in DNA sequencing. They will join a group responsible for working with other scientists in the Molecular Genetics Department to coordinate, plan and execute sequencing strategies, and to analyze the data. Mastery of either Maxam-Gilbert or Sanger sequencing methods is required.

We offer an excellent compensation and benefits package as well as opportunities for personal and professional growth. For confidential review, please forward your C.V. and names of three references to Barbara J. Schwartz, Associate Employment Administrator, S0007, Smith Kline & French Laboratories, Research and Development Division, P. O. Box 1539, King of Prussia, PA 19406-0539. We are an Equal Opportunity Employer, M/F/H/V.
**POSITIONS OPEN**

**HYDROGEOLOGIST**
UNIVERSITY OF CALIFORNIA, SANTA BARBARA

The Environmental Studies Program and the Department of Geological Sciences invite applications for a joint position in hydrogeology, beginning 1 July 1988 or later as negotiated. Ph.D. required at time of appointment. The appointment will be at the assistant, associate, or full professor level, depending on qualifications. The successful candidate will be expected to establish and maintain a high quality research program and teach courses at both the undergraduate and graduate levels. In addition to introduction to hydrogeology, areas of instruction might include groundwater flow and transport, new technologies in and alternative sources of water, remediation of contaminated groundwater, and other special subjects of mutual interest. Applicants should have a Ph.D. in Environmental Engineering or a closely related area and a strong background in geology and hydrology. A record of scholarly accomplishments and publications is essential. Application deadline: 1 December 1988. Submit a letter of application, curriculum vitae, three letters of recommendation, and copies of recent publications by 1 December 1988 to: A. E. Keller, Environmental Studies Program, University of California, Santa Barbara, Santa Barbara, CA 93106.

**POSITIONS OPEN**

**MAMMALIAN TOXICOLOGIST**

**ASSISTANT PROFESSOR**, tenure-track position for a toxicologist with specialization in the effects of insecticides and other mammalian toxicology. Available after 1 July 1988. A Ph.D. or equivalent degree, with research training in toxicology is required. Eleven months per year, three nine-week semesters, will include development of research program on effects and hazards of insecticides to onco- mammals and mammalian systems, research training and graduate students, participation in the entomology and environmental toxicology graduate programs and course instruction. Submit curriculum vitae, graduate transcript, recent reprints, a statement of research methods and objective, and names, addresses, and telephone numbers of five referees to: L. K. Gaston, Search Committee Chairman, Division of Toxicology and Physiology, Department of Entomology, University of California, Riverside, CA 92521. Applications accepted until 29 February 1988, or until a suitable candidate is selected. The University of California is an Equal Opportunity/Affirmative Action Employer.

**MAMMALOGIST**

Senior assistant or associate curator, tenure-stream position available. Ph.D. in evolutionary mammalogy required. Proven research capability and achievement in publications; experience in biochemical systematics (protein electrophoresis, karyotype, and DNA techniques); experience in fieldwork, collection and development and management. Salary commensurate with qualifications and experience. Starting 1 April 1988, negotiable. Send applications, including detailed research interests and publications, to: J. C. Dool, The Department of Biology, University of Arizona, Tucson, Arizona 85721. Inquiries are invited from all qualified candidates. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.

**INORGANIC OR ANALYTICAL CHEMISTRY**

**TENURE POSITION IN INORGANIC OR ANALYTICAL CHEMISTRY**

The Department of Chemistry at the University of Florida invites applications for a tenure-track position in the area of inorganic chemistry. This anticipated position will be filled at the assistant professor level in August 1988. Applicants must have a Ph.D. Postdoctoral experience is desirable. Duties will include research and teaching at the undergraduate and graduate level. The successful candidate will be expected to develop a productive, independently funded research program. Submit curriculum vitae, statement of research interests, and names of at least three references postmarked by 15 February 1988 to: Search Committee Chair, Department of Chemistry, University of Florida, PO Box 118400, Gainesville, FL 32611. A rapidly growing university of 17,000 students, the university system and is an Equal Opportunity/Affirmative Action Employer. As an agency of the State of Florida, the University makes all application materials and selection procedures available for public review.

**POSITIONS OPEN**

**MICROBIOLOGIST/ECOLOGIST**

Postdoctoral position available to study factors regulating nutrient availability at a cutover rainforest site in Costa Rica. Project aims to examine interactions between soil microbial processes and soil charge chemistry. Requires strong background in soil microbiology or ecosystem ecology and willingness to spend extended periods at a tropical field station. Send curriculum vitae and three letters of reference to: Dr. G. P. Robertson, W. K. Kellogg Biological Station, Michigan State University, Hickory Corners, MI 49060.

**MICROBIOLOGISTS/BIOCHEMISTS**

The Hospital Infections Program, Centers for Disease Control invites applications for a MEDI CAL EPIDEM IOL OGIST. Duties: conduct national surveillance and case-control studies of P. aeruginosa infections in cystic fibrosis (CF) patients, analyze data, and formulate infection control measures. Submit curriculum vitae, statement of research interests, and names of at least four references postmarked by 15 February 1988 to: Search Committee Chair, Department of Biological Sciences, University of Central Florida, Orlando, FL 32816. UCF is a rapidly growing university of 17,000 students, within the state university system and is an Equal Opportunity/Affirmative Action Employer. As an agency of the State of Florida, the University makes all application materials and selection procedures available for public review.

**CORNELL UNIVERSITY MICROBIOLOGIST—ASSISTANT PROFESSOR**

Applications are invited for a joint position in the Department of Microbiology, College of Agriculture and Life Sciences, Cornell University. This is a tenure-track 12-month appointment. The appointment will be expected to undertake a vigorous research program and participate in undergraduate and graduate teaching programs of the department. Applicants are invited from all qualified applicants. Applications should be received by 28 February 1988. Applications sent to: Professor R. E. Ortmann, Head, Department of Entomology, Cornell University, West Lafayette, IN 47907. Cornell University is an Equal Opportunity/Affirmative Action Employer.

**MAYTAG FELLOW IN ZOOLOGY**

**ARIZONA STATE UNIVERSITY**

Intended for recent Ph.D.s showing exceptional ability in research, this is a 1-year position with reappointment possible, that emphasizes collaborative research with a faculty member in the Department. Applications must include curriculum vitae, and three letters of recommendation, a statement of research plans, and a letter from the intended faculty collaborator at ASU. Review of applications will begin 15 February 1988. Starting date 15 August 1988. Applications from two individuals wishing to share the position will be considered. ASU is an Affirmative Action/Equal Opportunity Employer. For more information contact: Dr. R. M. Ratzevijk, Department of Entomology, Arizona State University, Tempe, AZ 85287-1501. Telephone: 602-965-4369.

**MICROBIOLOGISTS/BIOCHEMISTS**

Celgene Corporation, a leader in the application of biotechnology and chemical technology to the chemical industry is currently seeking experienced, innovative microbiologists and biochemists in the following areas:
- Metabolism of Aromatic Compounds
- Hydrocarbon Transformations
- Enzymatic Reactions
- Biotransformation

Candidates should have a Ph.D. in the relevant discipline, and have outstanding credentials in order to be considered for these highly qualified positions. Celgene is a well-funded public company with established facilities. Celgene is committed to becoming the premier industrial biotechnology company.

Candidates should immediately send detailed résumés to:

**SCIENCE, VOL. 239**

**DEPARTMENT OF MICROBIOLOGY**

**CORNELL UNIVERSITY**

**ASSISTANT PROFESSOR**

 Applicants are invited for the position of assistant professor in the Department of Microbiology, College of Agriculture and Life Sciences, Cornell University. This is a tenure-track 12-month appointment. The appointment will be expected to undertake a vigorous research program and participate in undergraduate and graduate teaching programs of the department. Applications are invited from all qualified applicants. Applications should be received by 28 February 1988. Applications sent to: Professor R. E. Ortmann, Head, Department of Entomology, Cornell University, West Lafayette, IN 47907. Cornell University is an Equal Opportunity/Affirmative Action Employer.

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**DEPARTMENT OF MICROBIOLOGY**

**CORNELL UNIVERSITY**

**ASSOCIATE PROFESSOR**

 Applications are invited for a joint position in the Department of Microbiology, College of Agriculture and Life Sciences, Cornell University. This is a tenure-track 12-month appointment. The appointment will be expected to undertake a vigorous research program and participate in undergraduate and graduate teaching programs of the department. Applications are invited from all qualified applicants. Applications should be received by 28 February 1988. Applications sent to: Professor R. E. Ortmann, Head, Department of Entomology, Cornell University, West Lafayette, IN 47907. Cornell University is an Equal Opportunity/Affirmative Action Employer.
IMMUNOLOGIST

Unigene Laboratories, a multidisciplinary biotechnology research corporation, is seeking a distinguished scientist for the following position:

SENIOR SCIENTIST

A strong background in Immunology with significant experience in immunosassay technology and tissue culture methodologies is required. The successful candidate will have a Ph.D. degree and a record of accomplishment demonstrating novelty and creativity. Post-doctoral or industrial experience is desirable but not required.

Unigene offers a comprehensive benefits package and the opportunity to work in an environment which fosters continuing professional development. Please send a C.V. and three references in confidence to:

Personnel Department
Unigene Laboratories, Inc.
110 Little Falls Road
Fairfield, NJ 07006

An equal opportunity employer

DIRECTOR OF MICROBIOLOGY AND PROGRAM DEVELOPMENT

The Medical and Health Sciences Division of Oak Ridge Associated Universities is seeking an innovative and creative Director of Microbiology and Program Development who will be responsible for establishing a microbiology program and coordinating division program development activities. Functions in the microbiology area will include proposal writing, staffing and research management. Division program development activities will include identifying areas for future program growth and direction, and potential funding sources, and performing liaison functions with agencies regarding research projects. Candidates should possess an MD or Ph.D., have a recognized record of scientific achievement in microbiology, possess good human relations and communication skills, and have at least fifteen (15) years research and broad biological research program management experience.

Send resume, salary history and requirements, and references to:

Employment Office
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117

EEO/AA

Research Associates

Maimonides Medical Center, a progressive 700 bed teaching hospital, has POST DOCTORAL RESEARCH ASSOCIATE positions available in the following areas:

MOLECULAR BIOLOGY

The selected candidate will perform recombinant DNA techniques in the fields of virology, and immunology. Research will involve viral gene amplification and detection (in situ hybridization).

IMMUNOLOGY

The successful candidate will study cellular and humoral immune mechanisms in the area of autoimmune diseases of the CNS. Experience in Protein Purification, T Cell Cloning, and/orSuppressor T Cell Assay desirable.

The above positions are available immediately and offer salaries in the range of $25K to $35K range, excellent fringe benefits, and an attractive Brooklyn location just 20 minutes from downtown New York City.

Please send C.V. and letters of reference to:

DR. F. MOKHTARIAN
Associate Professor and Director
Division of Virology/Immunology
DEPARTMENT OF MEDICINE

Maimonides Medical Center
4802 Tenth Ave, Brooklyn, NY 11219

Equal Opportunity Employer M/F

IDEON

IDEON CORPORATION is a new biotechnology research and development company located in Redwood City, CA. IDEON's research focuses on the development of products using anti-idiotypic monoclonal antibodies and immobilization techniques. IDEON is seeking experienced scientists to play key roles in building this exciting new enterprise.

IMMUNOCHEMIST — Ph.D. in Biochemistry or Immunology with 3+ years of post-doctoral experience. Expertise in the chemistry of antibodies and peptide antigens, immunoblotting and contemporary immunology.

MOLECULAR IMMUNOLOGIST — Ph.D. in Molecular Biology or Immunology with 3+ years of post-doctoral experience. Expertise in the molecular biology of immunoglobulins and/or immunoregulatory molecules.

Qualified candidates will have an opportunity to join a start-up company with the added strength of pharmaceutical manufacturing capability provided by IDEON's affiliation with INVITRON CORP. IDEON CORPORATION offers excellent salary, equity participation, and other benefits.

An equal opportunity employer.

For confidential consideration, please forward your C.V. and a list of three references to IDEON CORPORATION, Attn: R&D Department, 515 Galveston Drive, Redwood City, CA 94063.

ECOGEN, INC.

ECOGEN INC., an expanding biotechnology company located in the Philadelphia area and specializing in microbial pesticide development and biological control has immediate openings for the following positions.

Ph.D RESEARCH SCIENTIST:

Molecular biology with an emphasis on Pseudomonas species and with experience in DNA cloning, transposon mutagenesis and construction of gene fusions.

Ph.D./M.S. FORMULATION SPECIALIST, preferably with experience in biologicals.

Ph.D. POSTDOCTORAL FELLOW: experience in bacterial physiology, protease biochemistry, or insect digestive physiology.

B.S./M.S. RESEARCH ASSISTANTS:

Molecular biology (experience with Pseudomonas helpful).

Field research.

Quality control (analytical, protein, nucleic acid and immuno-chemistry).

Interested candidates should submit a current resume, including the names, addresses and telephone numbers of three references, to:

Personnel Director
EcoGen Inc.
2005 Cabot Blvd. West
Langhorne, PA 19047-1810

EcoGen is an Equal Opportunity Employer.

CLINICAL PROFESSOR OF EDUCATION

Brown University Biology

Faculty member in Education to instruct and supervise student teachers of Biology; to work with teachers in an urban public high school engaged in a significant reform effort; and to work with Brown Education and Biology faculty to define an emerging role for the University in secondary science education. The successful candidate will be an outstanding teacher-scholar experienced in school and university life. Salary range: $40,000-$44,000. Starting date: June 1, 1988. For a full description of the position call (401) 863-3783. Application deadline: January 29, 1988.

Send letter of intent, vitae, and 3 letters of recommendation to: Theodore R. Sizer, Chairman of the Education Department, Box 1238, Brown University, Providence, RI 02912.

Brown University is An Equal Opportunity Employer Committed to Affirmative Action.

Brown University
POSITIONS OPEN

MICROCHEMISTRY LABORATORY
SENIOR PROFESSIONAL ASSISTANT

The Jackson Laboratory in Bar Harbor, Maine, is seeking an individual directly involved in the daily activities of a core microchemistry laboratory for molecular biological research. Experience operating aprotein sequenator, mass spectrometers, and DNA/DNA hybridization equipment is highly desirable. The M.S. degree is preferred, but candidates with a B.S. in a relevant scientific discipline and with significant experience will be considered. Salary is competitive and commensurate with experience; excellent fringe benefits.

Send letter of application, curriculum vitae and three letters of recommendation to: Harold Wheeler, Employment Manager, The Jackson Laboratory, Bar Harbor, ME 04609. Closing date for receipt of applications is 15 February 1988. The Jackson Laboratory is an Equal Opportunity/Affirmative Action Employer.

Northeast Missouri State University invites applications for three tenure-track positions, beginning August 1988: MOLECULAR BIOLOGIST (with preference given to applicants with experience in virology or microbiology); MOLECULAR GENETICIST (with preference given to applicants with interest in plant or animal systems); and MOLECULAR BIOLOGIST (with preference given to applicants with a background in analytical chemistry or immunology). These positions will be available in the Spring of 1988. Applicants are expected to have completed a Ph.D. or equivalent degree and be able to provide evidence of research excellence and the promise of continued growth in research productivity. The successful candidate will be expected to teach both undergraduate and graduate courses. The successful candidate will be expected to contribute to the College of Science, Northeast Missouri State University, at Kirksville, MO 63501.

Concordia University invites applications from MOLECULAR GENETICISTS and MOLECULAR BIOLoGISTS for two tenure-track positions at the level of assistant professor in the Department of Biology to commence 1 June 1988. The successful candidate will participate in undergraduate and postgraduate teaching programmes of the Department, have a Ph.D. degree or equivalent, and will probably already have at least 2 years of postdoctoral experience. The Department has a preference for candidates with micro- bial interests. Applications will be considered until the position(s) are filled. Interested candidates should send their curriculum vitae and three letters of recommendation to: Dr. W. J. Magruder, Head, Division of Science, Northeast Missouri State University, Kirksville, MO 63501.

OB/GYN FACULTY POSITION

The Department of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center in Oklahoma City is seeking an individual with research interests in reproductive biology. The candidate must have academic training in reproductive biology, early gamete physiology, and andrology. Ph.D. required. Preference will be given to (i) individuals familiar with in vitro fertilization techniques, especially in nonhuman primates, and (ii) individuals with at least a peripheral interest in reproductive immunology. The individual should be prepared to participate in student and resident teaching and to contribute to research projects of students and residents. Candidates should be capable of initiating research efforts with clinical faculty as well as working independently on more basic projects.

Send curriculum vitae and bibliography: John I. Fishburne, Jr., M.D.
Chairman
Department of Obstetrics and Gynecology
University of Oklahoma College of Medicine
P.O. Box 20509
Oklahoma City, OK 73190
An Equal Opportunity Employer

POSITIONS OPEN

MOLECULAR BIOLOGY POSTDOCTORAL POSITION

A position is available immediately to join a laboratory investigating the biology of early gamete development. Applicants should have a recent Ph.D. in molecular biology, with a strong background in recombinant DNA techniques, experience in the use of oncogenes and growth factors in tumor progression. Send curriculum vitae, thesis abstract, and names and addresses of three references to: Box 109, M. D. Anderson Hospital and Tumor Institute, 1515 Holcombe Boulevard, Houston, TX 77030. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR CARCINOGENESIS UNIVERSITY OF WISCONSIN

ASSISTANT SCIENTIST AND POSTDOCTORAL POSITIONS are available for projects studying the interactions of oncoproteins and "anti-oncoproteins" in mammary carcinogenesis. The assistant scientist position requires previous postdoctoral research in areas of molecular biology such as RFLP analysis, gene transfer, transgenic animals, mini-satellite probes, PCR, and library construction and screening. Interested applicants should submit their curriculum vitae, copies of relevant publications and the names of three references to: Michael N. Gould, University of Wisconsin–Madison, 600 Highland Avenue, Madison, WI 53792.

NEUROBIOLOGIST CARLETON COLLEGE

Applications are invited for a tenure-track neurobiologist position in the Department of Biology available September 1988. Responsibilities include teaching a neurobiology course, an animal physiology course, as well as participating in a team-taught introductory course. Candidates with research interests in cellular or molecular aspects of neurobiology will be most competitive. The research should lend itself to participation by undergraduate and graduate students, and to be supported by outside funding. The Department is most interested in persons with a commitment to teaching and research in the context of a liberal arts college. Applicants must have a Ph.D.; postdoctoral work is advantageous. Women and minority candidates are encouraged to apply. Applications, including curriculum vitae, undergraduate and graduate transcripts, a summary of research goals, and three letters of recommendation should be sent to: Dr. J. L. Tymoczko, Department of Biology, Carleton College, Northfield, MN 55057-4025 by 1 February 1988.

Carleton is an Equal Opportunity/Affirmative Action Employer.

NEUROPHYSIOLOGY FACULTY POSITION

Tenure-track faculty position as assistant or associate professor available 1 July 1988. Minimum requirements include a doctoral degree, 2 years of postdoctoral training, and teaching experience. Applicants should be conducting or competitive in extramural funding. The faculty member will be expected to teach neurophysiology to medical and graduate students and to develop a strong research program. Laboratory space, equipment, and startup funds are available. Send résumé, description of research interests, and three or more letters of recommendation to: Norman R. Keese- man, Ph.D., Department of Physiology, Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112. Tulane University is an Affirmative Action/Equal Opportunity Employer.

A Division of Clinical Immunology has recently been established at Roswell Park Memorial Institute. This new clinic is interested in the development of methodologies to response modifiers with an extensive laboratory program focused on immunocompetent; anti-idiotype and lymphokines. The successful candidate will be responsible for developing and/or lymphokines activated killer cells are under way or planned. These therapies will be exploited in patients with hematologic malignancy. The department is seeking a laboratory with experience in the area of microbiology or immunology.

Send curriculum vitae and complete transcripts, three letters of professional evaluation including critical comments on past teaching performance and research ability, and the applicant's statement of plans for future professional development. Applications are accepted until 1 September 1988, or until position is filled. Send applications to: Mrs. Jeanne Kruse, Administrative Assistant, Augusta College, Augusta, GA 30901.

PLANT AQUATIC ECOLOGIST

The Augustana College Biology Department has a tenure-track opening for an assistant professor (Ph.D.) in September 1988. Applicants must be prepared to teach aquatic biology, principles of ecology, and laboratory techniques in an introductory biology course. Staff members are expected to maintain active research programs that involve undergraduate students. Augustana is a liberal arts college related to The Evangelical Lutheran Church in America. Applications should include curriculum vitae, complete transcripts, three letters of professional evaluation including critical comments on past teaching performance and research ability, and the applicant's statement of plans for future professional development. Applications accepted until 1 September 1988, or until position is filled. Send applications to: Marcia Fox, Chairm
POSTDOCTORAL ASSOCIATE available immediately to study the cellular mediators of acquired antituberulous immunity within the chronically infected mouse lung. Experience in cloning and cellular immunology is desirable.

The Trudeau Institute is a private, not-for-profit basic medical research institution located on the shore of Lower Saranac Lake and 10 miles from Lake Placid, New York. Subsidized housing and liberal fringe benefits are available. Send curriculum vitae and names of three references to:

Dr. Frank M. Collins
Trudeau Institute
P.O. Box 59
Saranac Lake, NY 12983
POSTDOCTORAL ASSOCIATE
CIRCULATORY PHYSIOLOGY
THE UNIVERSITY OF VERMONT

Position available for 2 years to study the cellular and physical factors that influence blood vessel regulation. The research program focuses on mechanisms operative in small arteries, with major interest in stroke, hypertension and coronary vasospasm. The successful candidate will participate in a stimulating multidisciplinary vascular research curriculum. Vitae and three references to: Dr. William Halpern, Department of Physiology and Biophysics, University of Vermont, College of Medicine, Burlington, VT 05405. Telephone: 802-656-3098.

A POSTDOCTORAL COLLEAGUE is sought who will apply techniques of molecular biology to the investigation of neurotransmitter processing and its regulation, building on recent work on Aplysia bag cells (J. Neurosci. 11, 229, and crab sinus gland (J. Neurochem. 49, 574). Position to start January 1988, or after, now funded for at least 18 months. Salary: $23,016 and $30,264. Send curriculum vitae and names of three references to: Robert Newcomb, Békésy Lab. of Neurobiology, University of Hawaii, 1630 East-West Road, Honolulu, HI 96822. Telephone: 808-948-8001. Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW IN DEVELOPMENTAL NEUROBIOLOGY for studies on positional information in the eye of the mouse embryo. Antigenic epitopes and their distribution in the embryonic eye are being identified by monoclonal antibodies. A candidate preferably with background in protein biochemistry and immunology is sought to participate in the characterization of these antigens. Knowledge in tissue culture and embryology is desirable. Send curriculum vitae and names of references to: Dr. Ursula Galibert, Department of Neurology, Harvard Medical School, Boston, MA 02115.

POSTDOCTORAL FELLOW SIGNAL TRANSUDCTION Position available immediately to study mechanisms of receptor- and G-protein-mediated control of ion channels, phospholipases and phospholipase A2 in neurons and hematopoietic progenitor cells. Send curriculum vitae and references to: Dr. T. G. Gabit, Indiana University Medical Center, 4740 River Road, Room 379, Indianapolis, IN 46223. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for a Ph.D. in biochemistry, immunology, cell biology, pharmacology, or related area to study the cellular mechanisms of multidrug resistance in cancer cells. Experience in monoclonal antibody production and membrane/receptor biochemistry desirable. The candidate is expected to be up to three years postdoctoral. Send curriculum vitae and references to: Dr. Ahmad R. Safa, Joint Section of Hematology/Oncology, University of Chicago and Michael Reese Medical Centers, L231 Blood Center, Lake Shore Drive at 31st Street, Chicago, IL 60616.

POSTDOCTORAL POSITION available immediately for a recent Ph.D. with experience in molecular biology for a newly funded project to characterize the biochemistry of the cloned HIV pol gene products. The applicant will join a multidisciplinary group investigating the molecular and biological mechanisms of multidrug resistance in cancer cells. Experience in monoclonal antibody production and membrane/receptor biochemistry desirable. The candidate is expected to be up to three years postdoctoral. Send curriculum vitae and references to: Dr. Ahmad R. Safa, Joint Section of Hematology/Oncology, University of Chicago and Michael Reese Medical Centers, L231 Blood Center, Lake Shore Drive at 31st Street, Chicago, IL 60616.

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Experimental Oncology

Burroughs Wellcome Co. is committed to developing and marketing important new medicines to relieve suffering and combat disease through medical research. We currently have a position available for a Senior Research Scientist in the Experimental Oncology Section of the Medicinal Biochemistry Department. Your main responsibility will be to carry out studies on the development and use of in vitro systems for the selection and evaluation of potential antitumor drugs and on the differentiation of neoplastic cells.

To qualify, you must have a Ph.D. or equivalent in biochemistry, cell biology or a related field and one or more years of relevant postdoctoral experience. Requirements also include a background in oncology and extensive experience in mammalian cell culture. Previous experience in enzymology and HPLC is desirable.

As a professional with Burroughs Wellcome Co. you can expect a highly competitive salary and an excellent benefit package. Qualified minority, female, handicapped and veteran individuals are encouraged to apply. For consideration, please send your resume to: BURROUGH'S WELLCOME CO., Attn: Employment Supervisor, Position #3018, 3030 Cornwallis Road, Research Triangle Park, NC 27709. We are an equal opportunity employer.

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Postdoctoral Fellow Molecular Oncology/Tumor Cell Biology
Genentech, Inc.

The Department of Pharmacological Sciences has an immediate opening for a postdoctoral fellow to work in the area of modulation of growth factor receptor function. The focus of the project will be the role of growth factors and their receptors in human breast cancer.

The successful candidate will have a strong background in molecular and cellular biology and a keen interest in understanding the mechanisms of tumorigenesis.

Please send your CV and letter of interest to: Dr. Michael Shepard, Department of Pharmacological Sciences, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

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FACULTY POSITIONS

DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY
THE PHILADELPHIA COLLEGE OF PHARMACY & SCIENCE

Several full-time, tenure-track vacancies exist in the Department of Pharmacology & Toxicology at PCPS. Faculty appointments will be made at the academic level of Assistant or Associate Professor, by July 1, 1988.

Responsibilities will include:
- instruction of undergraduate and graduate students majoring in biomedical educational programs offered by the College;
- development of extramurally funded research in an area of scientific interest directly related to pharmacology or toxicology;
- professional service contributory to departmental and institutional goals and objectives.

Requirements for these positions are:
- Ph.D. degree in pharmacology, toxicology or closely allied field;
- postdoctoral training and research specialization;
- record of teaching experience and scholarly publications;
- evidence of probable success in obtaining funds to support research.

Persons with research training/experience in one of the following areas are particularly encouraged to apply: cardiovascular, molecular, neuroendocrine and immunopharmacology or toxicology.

Please submit a letter of interest, curriculum vita and a list of three professional references to:
DR. JOHN A. GANS, Acting Dean of Pharmacy
PHILADELPHIA COLLEGE OF PHARMACY & SCIENCE
Woodland Avenue at 43rd Street, Philadelphia, PA 19104
An Equal Opportunity, Affirmative Action Employer

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RESEARCH SCIENTIST (Ph.D.)
PROTEIN CHEMISTRY

The Fine Chemical Division of The Upjohn Company has an opening in its Bioprocess Research and Development unit for a Ph.D. Protein Chemist. This laboratory position involves isolation and purification process development for recombinant proteins and monoclonal antibodies. A strong protein isolation and characterization background is required. Experience in immunochemistry is desirable.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers a very competitive salary, commensurate with experience and an outstanding benefits program.

For confidential consideration, please call toll free 1/800/253-8600, ext. 3-6767, (inside Michigan call collect 616/323-6767) to request an employment application be sent to you. Please refer to Ad Number 1752-F when calling.

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Our commitment to scientific excellence continues...

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1 JANUARY 1988
POSTDOCTORAL POSITION

POSTDOCTORAL POSITION in neurobiology/endocrinology is available January 1988 to study electrophysiological correlates of hypothalamic-pituitary-adrenal (HPA) axis activity and stress. Training will focus on changes in ion conductance (Ca++-, K+-, etc.) in adrenocortical cells modulated by adrenocorticosteroids (agonist-dependent ACTH, and K+). Experience with cellular recording and patch clamp techniques is highly desirable. Send resume and three references to: Dr. M. Carter Cornwell, Department of Physiology, Bowman University School of Medicine, Boston, MA 02118. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for qualified Ph.D. or M.D./Ph.D. to study eicosanoid metabolism in tumor cells, regulation of surface expression of "tumor" receptors and their relation to metastasis. Experience in lipid biochemistry particularly eicosanoids and receptor/cytokine cell biology desirable. Salaries up to $24,000. Send curriculum vitae with names and three references to: Dr. Avraham Razi/Kenneth V. Hoag, Cancer Metastasis Program, Michigan Cancer Foundation, 110 East Warren, Detroit, MI 48201.

POSTDOCTORAL POSITION—NII Training Grant. Hormone Action. Excellent opportunity for Ph.D. or M.D. trained in acquiring and utilizing an assessment of contemporary techniques of molecular biology to the study of thyroid hormone action in a physiologically relevant setting (the full cloning sequence). Send curriculum vitae, list of publications, and names of three references to: Theodore J. Cicer, Ph.D., Department of Psychiatry, Washington University School of Medicine, 4945 Audubon Avenue, St. Louis, MO 63110. Positions are open to investigators holding the Ph.D. degree in relevant areas and M.D. candidates who have completed four years of relevant experience. We are particularly interested in the recruitment of minorities and physicians and we encourage such applications. Washington University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION NEUROCHEMISTRY

Opening for Ph.D. or M.D. with experience in membrane biochemistry/cellular neurobiology to participate in studies on the purification and characterization of potassium channel proteins. Knowledge of molecular biological techniques, particularly recombinant techniques, and experience with some preparations helpful but not essential. Exciting opportunity for training in a very lively academic environment. Position available summer 1988; salary commensurate with experience. Send curriculum vitae, and three letters of recommendation to: Dr. Morton P. Blaustein, Department of Physiology, University of Maryland School of Medicine, 665 West Baltimore Street, Baltimore, MD 21201. The University of Maryland is an Affirmative Action/Equal Employment Opportunity Employer.

POSTDOCTORAL POSITION: YEAST

Available immediately, NIH funds. Use of killer toxin gene fusions as a model for secretion and processing of proteins in yeast, including the isolation and characterization of hypersensitive and processing mutants. Analysis of the promoter organization and functions of toxin components. Experience in recombinant DNA/molecular genetics/protein biochemistry techniques desirable. Send curriculum vitae and three letters of recommendation to: Dr. Donald J. Tipper, Department of Molecular Genetics and Microbiology, University of Massachusetts Medical Center, Worcester MA 01655. UMMC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS.

D.V.M., D.D.S., M.D. or Ph.D. may pursue a graduate degree in comparative and experimental medicine. Persons holding medical degrees should expect emphasis on laboratory training. Those with strong research experience may devote a 100% effort to laboratory research. Active programs in virology/immunology, respiratory disease of livestock, hematology, environmental toxicology and animal models of human diseases. Contact: Mr. Dreama Cathey, College of Veterinary Medicine, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901-1071. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS: D.V.M., D.D.S., M.D. or Ph.D. may pursue a graduate degree in comparative and experimental medicine. Persons holding medical degrees should expect emphasis on laboratory training. Those with strong research experience may devote a 100% effort to laboratory research. Active programs in virology/immunology, respiratory disease of livestock, hematology, environmental toxicology and animal models of human diseases. Contact: Mr. Dreama Cathey, College of Veterinary Medicine, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901-1071. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS (Research) available to study the molecular regulation of glycoprotein biosynthesis. Background in biochemistry or molecular biology required; previous experience with isolation of amplified genes from human tumors, (iii) genetic mechanisms of tumor metastasis. Experience in molecular biology and cell biology essential; three letters of reference to: Dr. Igor Roninson, Center for Genetics, University of Illinois at Chicago, 808 South Paulina St., Chicago, IL 60612. Equal Opportunity Employer/Affirmative Action.

POSTDOCTORAL POSITIONS IN HUMAN MITOCHONDRIAL GENETICS. We are studying the genetics of oxidative phosphorylation (OXPHOS) and analyzing OXPHOS gene variation in relation to the occurrence of disease or variation in phenotype. OXPHOS provides much of the cellular ATP and is unique in being assembled from genes encoded in the nuclear DNA (nDNA) and the small circular DNA (mtDNA). Positions include: (i) identification of biochemical defects and mtDNA mutations associated with maternally inherited diseases and design of diagnostic tools and therapeutic regimes; (ii) characterization of mtDNA variation in aboriginal populations and reconstruction of ancient female migration patterns; and (iii) isolation and characterization of nDNA OXPHOS genes and examination of the coevolution and interaction of nDNA and mtDNA genes [Singh et al., Nature 289, 270 (1987); Oya et al., Science 230, 880 (1987)]. Candidates interested in applying their molecular genetic, population genetic, or OXPHOS enzymological expertise to the study of this fascinating and vital system should send their curriculum vitae and three letters of reference to: Dr. Douglas C. Wallace, Professor of Biochemistry, 109 Woodruff Memorial Building, Emory University School of Medicine, Atlanta, GA 30322. Emory University is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN MOLECULAR NEUROBIOLOGY. Projects include studies on the structure and control of brain actin and myosin, properties of class A and B protein tyrosine kinases, control of amyloid beta protein formation, and characterization of the infectious scrapie agent. Experience in protein chemistry and/or molecular biology essential. Salary $27,794. Applications are encouraged to apply. Send curriculum vitae and three letters of recommendation to: Dr. Marshall Elzinga or Dr. David C. Bolton, NYS Institute for Basic Research, 1050 Forest Hills Road, Staten Island, NY 10314.

POSTDOCTORAL POSITIONS IN NUTRITIONAL SCIENCES at the University of Illinois at Urbana-Champaign. Positions involve fundamental and applied nutrition of animals or humans. Individuals with Ph.D. in agriculture or allied fields are encouraged to apply. Applications must be received by 1 February 1988. Contact: Dr. J. A. Miller, Director, Division of Nutritional Sciences, 451 Beverly Hall, Urbana, IL 61801. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS IN PROTEIN CRYSTALLOGRAPHY. Two postdoctoral positions in protein crystallography will be available on or after 1 December 1987 to study the structure of myosin subfragment-1 or proteins involved in electron transport. Experience in crystallography of diffraction is required. Send curriculum vitae and three letters of recommendation to: Drs. Ivan Rayment and Hazel M. Holden, Department of Biochemistry, Biological Sciences West, University of Arizona, Tucson, AZ 85721. An Affirmative Action/Equal Opportunity Employer.

FOREST BIOTECHNOLOGY

USDA FOREST SERVICE

POSTDOCTORAL RESEARCH ASSOCIATE

Position in conifer culture and transformation. Position open to recent Ph.D. in forestry, botany, plant pathology, or related field. A background in conifer tissue culture required; experience with conifer tissue culture and Agrobacterium transformation preferred. Individual will become proficient in small-scale transformation expertise to existing projects on the molecular genetics of conifers as well as develop independent research. This is a 2-year appointment. To apply, send curriculum vitae and letter of interest by 1 February 1988 to: D. Neale, Genetics Unit, P.O. Box 245, Berkeley, CA 94701 or telephone: 415-486-3688 or 415-486-8765 for more information. The Forest Service is an Equal Opportunity Employer.
POSITION AVAILABLE
DIRECTOR, OFFICE FOR SUBSTANCE ABUSE PREVENTION
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
PUBLIC HEALTH SERVICE
DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Alcohol, Drug Abuse, and Mental Health Administration invites nominations and applications for the position of Director, Office for Substance Abuse Prevention (OSAP).

This is a Senior Executive Service position in the career Civil Service, with an annual salary range of $64,700 to $73,400. Physicians may also be eligible for a Physicians’ Comparability Allowance of up to $20,000 per year. The position is located in Rockville, Maryland.

OSAP provides leadership and guidance for program planning, evaluation, and coordination for the national effort in the prevention of alcohol, and drug abuse; develops policies and procedures to assure coordination within the Agency, and the Department, in program implementation; coordinates all program planning, educational, and evaluation activities, and provides liaison among the Institutes, regional offices, private activities, State and local governments, as well as with the Secretary for Health and Human Services and other Federal agencies. The incumbent of this position works under the broad general direction of the Administrator and provides the overall leadership and guidance for OSAP programs. The incumbent is responsible for directing and supervising the Office of the director and three Divisions, with a budget of approximately $48 million and 56 FTE’s in FY 1988.

Minimum qualifications requirements include the following: a degree of Doctor of Medicine, Doctor of Osteopathy, or a bachelor’s or higher degree in an academic field relating to the health sciences pertinent to the work of the position; experience with responsibility for the development, administration, and evaluation of alcohol and drug prevention and/or treatment programs is also required. Candidates must also have experience in the management of programs demonstrating competence to assume leadership in planning, staffing, directing, coordinating, and allocating resources, and other responsibilities associated with executive leadership of a major national program.

Further information about the position and qualifications requirements may be obtained by contacting Ms. Leslie Everheart at 301/443-5030. Applications (Application for Federal Employment, SF 171) accompanied by a current curriculum vitae and bibliography should be submitted to Ms. Everheart at the Division of Personnel Management, Alcohol, Drug Abuse, and Mental Health Administration, 5600 Fishers Lane, Room 15C-26, Rockville, Maryland 20857. Applications will be accepted without the SF 171, provided that the SF 171 is submitted upon request. Complete application material (including the SF 171) must be postmarked by January 29, 1988.

Applications from women and minority group members are especially solicited.

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

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BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc., a major innovator in the research, development, and marketing of ethical drugs, has the following openings in the Department of Toxicology and Safety Assessment.

These positions are located at our Research and Development Campus in DANBURY, CONNECTICUT.

**REVIEWING TOXICOLOGIST**

This position will be responsible for the critical review and evaluation of pharmacology and toxicology studies, the analysis and interpretation of data and the integration of reports into scientific documents for international registration. This is primarily a non-laboratory environment but the opportunity exists for participation in the department’s toxicology research efforts.

Requirements include a Ph.D. or Masters (with equivalent experience) in Toxicology, Pharmacology or related life science with 2-4 years of industrial (pharmaceutical) or government experience.

BOEHRINGER INGELHEIM offers a highly competitive compensation and benefits package, relocation assistance, an excellent work environment and the opportunity to have your contributions recognized.

For confidential consideration, please forward your curriculum vitae and salary requirements to:

Dept. JC-11S,

BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc.,

90 East Ridge, P.O. Box 368,

Ridgefield, CT 06877. We are an equal opportunity employer.

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**PATHOLOGIST**

This NEWLY created position will be responsible for the implementation of an in-house pathology program within the framework of preclinical toxicology testing for international drug applications, the management of scientific staff, the establishment of priorities and the effective utilization of program resources.

This position requires a D.V.M. or Ph.D., board certified in Pathology, with significant experience in reviewing microscopic slides in preclinical drug safety studies and administrative or management experience.

For confidential consideration, please forward your curriculum vitae and salary requirements to:

Dept. JC-11S,

BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc.,

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Ridgefield, CT 06877. We are an equal opportunity employer.

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Boehringer Ingelheim
POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS available in spring 1988 to study the mechanisms by which blood coagulation and angiotensin II stimulate platelet aggregation and phosphatidyl inositol 4,5-bisphosphate breakdown and activate protein kinases in the cell. Major emphasis will be placed on the role of G protein-linked receptor systems and their pathways of regulation.

A background in membrane biochemistry or molecular biology and an interest in hormone action are desired. Please send curriculum vitae and three letters of recommendation to: Dr. James C. Garrison, Department of Pharmacology, University of Virginia School of Medicine, Charlottesville, VA 22908.

POSTDOCTORAL/RESEARCH ASSOCIATE position to study the molecular neurobiology of Alzheimer's disease. Qualifications include a Ph.D. or M.D. with a strong background in immunology, cell biology, and in vitro cell cultures. Experience with cDNA/or/normal vector system vectors desirable. The candidate will be part of an effort to study the mechanism of amyloid accumulation in the CNS of the Alzheimer's disease and Down syndrome patients using molecular biology and immunohistochemistry. Please send curriculum vitae and the names of three references to: Dr. Nikos Robakis, Mount Sinai School of Medicine, Department of Neurology and Pharmacology, 1 Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE Position available to study mammalian aldehyde dehydrogenase regulation and enzymology as these relate to the bioformation of drug-agents used to treat cancer and/or for treatment of hypoglycemia. Highly qualified applicants will have Ph.D. and experience in enzymology, protein purification, immunology, and cell culture. Send curriculum vitae and three letters of reference to: Dr. N. E. Sladek, Department of Pharmacology, 3-260 Millard Hall, University of Minnesota, Minneapolis, MN 55455.

POSTDOCTORAL RESEARCH ASSOCIATE position located in Clemson, South Carolina (temporary: not to exceed 2 years), available to study habitat selection of southeastern fox squirrels and southern flying squirrels. Applicants should have a recent Ph.D. in wildlife biology, ecology, or mammalogy. Must have a strong quantitative background to assess squirrel abundance in relation to habitat and ability to develop a comprehensive program of field studies and interact with land managers. Starting salary is $27,172 per annum. For more information contact: Services to Students with Disabilities, University of California, Berkeley, CA 94720. An Equal Opportunity Employer. Women and minority candidates are encouraged to apply. Send letter of application, complete résumé, and names of three references to: Dr. Marc R. Lennarz, USDA Forest Service, Forest Health and Wildlife Research, Southeastern Forest Experiment Station, Department of Forestry, Clemson University, Clemson, SC 29634--1003.

POSTDOCTORAL RESEARCH ASSOCIATES

Positions for NCI postdoctoral training program in molecular and cellular mechanisms of carcinogenesis are available at The University of Texas System Cancer Center (UTSCC)—Science Park. Research programs focus on the following areas: somatic cell genetics, DNA repair and mutagenesis, carcinogen metabolism and ad- duct formation, tumor promotion, mechanisms of lymphocyte transformation, and tumor cell differentiation. Additional biochemical genetics, growth factors, and retroviruses. Applicants must be U.S. citizens or permanent residents and have a Ph.D., M.D., or D.V.M. degree. For application forms, write: Dr. Thomas J. Shagon, Director, UTSCC, Science Park Research Division, P.O. Box 389, Smithville, TX, 78957. Telephone: 512-257-2408. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATES

Postdoctoral research associate positions available immediately to study cell surface markers and cytochemistry in barbiturate and barbiturate derivatives. Should have experience in receptor binding. HPLC analysis of neurotransmitters and their metabolites in rat brain and purification and identification of proteins. Send curriculum vitae and the names of three references to: D. I. K. Ho, Department of Pharmacology and Toxicology, The University of Michigan Medical Center, 400 E. Medical Center Dr., Ann Arbor, MI 48109. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

POSTDOCTORAL RESEARCH ASSOCIATE position available to study mechanisms of steroid hormone regulation of cell proliferation. Candidate should have experience in cell culture techniques, molecular endocrinology, and experience in purification and characterization of peptide hormones or other biologically active peptides. Send curriculum vitae and references to: Dr. Petrii S. Kiiher, Reproductive Endocrinology Center, 1500 California St., San Francisco, CA 94115.

POSTDOCTORAL RESEARCH ASSOCIATE position to study topography of glycopolation and sulfation reactions using biochemical, cell and molecular biological approaches. See Annual Review Biochemistry, 56, 643 (1987). Send curriculum vitae and three references to: Dr. C. B. Hirschberg, Department of Biochemistry, University of Massachusetts Medical Center, Worcester MA 01655. UBM is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITION available immediately for molecular biologist to participate in project examining expression and function of human cell receptors involved in cell-cell and cell-substra tum adhesion. Candidates should be familiar with gene cloning and sequencing. Salary is commensurate with training. Send curriculum vitae and three references to: Dr. William J. Parada, Division of Neurobiology, Fred Hutchinson Cancer Center, 1124 Columbia Street, Seattle, WA 98104.

POSTDOCTORAL TEACHING/RESEARCH ASSOCIATE IN ZOOLOGY ARIZONA STATE UNIVERSITY (ASU)

A postdoctoral associate position is open for the 1988 to 1989 academic year in the Department of Zoology. Responsibilities will include teaching in the laboratory component of a large, nonmajor introductory biology and genetics course and collaborative research in biology or biology education with a faculty member in the Department. The appointment may be renewed for another academic year subject to the availability of funds. Send curriculum vitae, three letters of recommendation, a statement of research plans, documentation of teaching experience and abilities, and a letter from the intended faculty collaborator at ASU. Review of applications will begin 15 February 1988. Starting date is 15 August 1988. Applications from two individuals wishing to share the position will be considered. ASU is an Affirmative Action/Equal Opportunity Employer. For more information contact: Dr. Ronald L. Kutowski, Department of Zoology, Arizona State University, Tempe, AZ 85287-1501. Telephone: 602-965-4369.

REMOTE SENSING. The School of Oceanography at the University of Washington seeks applications for a RESEARCH FACULTY POSITION in remote sensing. The School currently carries out field and theoretical research in various disciplines including general circulation, wave and eddy dynamics, climate, and high-latitude dynamics. Strong interactions exist with the Department of Atmospheric Sciences, NOAA's Pacific Marine Environmental Laboratory, and the University's Applied Physics Laboratory. The School of Oceanography is committed to developing a remote sensing research program. This program will focus primarily on the mid- and high-latitude North Pacific, particularly on the relationship between wind forcing and the deep water evolution, wave forcing and biological productivity; and on seaice dynamics. Strong theoretical, observational, and modeling programs already exist in these fields. Emphasis will be on candidates with previous experience in remote sensing especially in the use of sea surface altimeter and scatterometer data. Previous experience in interdisciplinary research and teaching in areas such as sensor capability and analysis of remotely sensed data will be encouraged.

The position will require a letter of application, curriculum vitae, appropriate re- prints, and the names of four references to: Dr. Arthur D. D. Ralls, Department of Oceanography, University of Washington, PB-10, University of Washington, Seattle, WA 98195. (Telephone: 206-545-0932; TEE: E-mail: A. NOWELL). The closing date for applications is 29 February 1988. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSSIBLE TRAINING PROGRAMS AND BEHAVIOR CORNELL UNIVERSITY

Opportunities for research training are available through an NIH-funded training grant at both entry and postdoctoral levels. Program in Pharmacology and Behavior includes an interdisciplinary group of integrative, cellular, and molecular neurobiologists and collaborative projects are encouraged.

For information and application materials write: Director, Postdoctoral Training Program Section of Neurobiology and Behavior Seeley G. M. Mall, Cornell University, Ithaca, NY 14853--2702.

HOST-PARASITE INTERACTIONS POSTDOCTORAL FELLOW—STANFORD UNIVERSITY

Applications are invited for a postdoctoral study in the Department of Medical Microbiology as part of an NIH-funded training program. Persons interested in microbiology and immunology as it relates to the molecular basis of the host-parasite interaction are encouraged to apply. Research areas covered by the 12 faculty include virology, bacteriology, immunology, and molecular/microbial biology with particular emphasis on the application of molecular biology to studies in these systems.

Postdoctoral candidates will be on no more than 2 years of NIH-supported postdoctoral experience. They should write directly to the faculty member of interest or, for a list of faculty and their research, to: Ms. Gloria Samuel, Department of Medical Microbiology, Fairchild Building D319, Stanford University School of Medicine, Stanford, CA 94305--5402.

Applications will be accepted at any time before 15 June 1988 for support beginning 1 September 1988. Stanford welcomes and encourages applications from women and minority students.

POSTGRADUATE RESEARCH POSITION [Department of Medicine, University of California, San Diego (UCSD)]. NIH-sponsored research investigating cellular mechanisms of stimulation of EGF receptors in exocrine pancreas. Salary within UCSD research salary scale. Degree in cell biology/pharmacology. Start February/March 1988. Send curriculum vitae, research interests, and names of two references to: Dr. J. J. Pando, VAMC (V-111D), 3350 La Jolla Village Drive, San Diego, CA 92161. Affirmative Action/Egal Opportunity Employer.

PROFESSOR AND HEAD

The Department of Botany and Microbiology, in the College of Sciences and Mathematics at Auburn University, invites applications and nominations for an accomplished educator to direct the department of 25 faculty and professional staff. The Department is also responsible for the principal Molecular Genetics Program of the University. The Head will be expected to provide intellectual and philosophical leadership and support for faculty, staff, and students in their teaching and research activities. Although classical areas of botany and microbiology remain an integral component of the Department, future emphasis will be given to subcellular and molecular processes of plants and microbes, molecular genetics, and developmental biology. The Department is also an emerging program in plant-microbial interactions with emphasis on the rhizosphere. Although the primary responsibilities of the Professor and Head of the Department's programs, an active research program with extramural funding is encouraged. Qualifications for the candidate include a Ph.D. in an appropriate discipline, a record of outstanding scholarly achievement, and demonstrated potential for administration. Review of applications will begin March, 1988, and will continue until the position is filled. Applications should be sent to the Department of Botany and Microbiology, Auburn University, Auburn, AL 36849.
Electron Microscopy Opportunity

Genentech, Inc., a leader in the field of biotechnology, is seeking an individual to establish and manage a multiuser electron microscope facility. Individual should be familiar with a wide range of TEM and SEM sample preparation techniques. Experience with immunolocalization of proteins in tissues and cells is highly desirable.

Individual must be willing to interact with users from many different areas and will be involved with helping accomplish routine regulatory work as well as basic research projects. Facility will include two TEMs and one SEM. Genentech, Inc. offers an excellent salary and benefits package, coupled with the opportunity to make a significant contribution to our organization. Please send resume and 3 letters of reference to: Dr. John Patton, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

Molecular Immunologists

The Department of Immunology of Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, is seeking outstanding scientists to expand its current research programs in immunopharmacology. The individuals will be involved in a multidisciplinary research effort focused on mechanistic studies, ligand-receptor interactions, and immunoregulation.

Successful candidates are required to have:
- a Ph.D. in Immunology, with at least 3 years postdoctoral experience in cellular or molecular immunology.
- expertise and/or practical knowledge in ligand-receptor interactions, signal transduction and molecular immunoregulation.
- a strong publication record.
- excellent oral and written communication skills.
- ability to interact with a multidisciplinary research team.

We offer excellent compensation and benefits as well as an attractive relocation policy. For confidential consideration, send your C.V. and names of three references to Robert F. Obst, Manager, Personnel Relocations, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.
RESERCH ASSOCIATE position available immediately for a molecular biologist to investigate the role of antioxidants in development and aging of Drosophila. Send curriculum vitae and names of three references to: James Fleming, Linus Pauling Institute of Science and Medicine, Palo Alto, CA 94306.

RESEARCH OPPORTUNITY IN PLANT BIOTECHNOLOGY

The Biological Sciences Section of the Garst Seed Company, a member of the ICI International Seeds Business, is seeking experienced BREEDING BIOCHEMISTS to work in the molecular genetics area. Requirements include a B.S. or M.S. degree preferably in genetics, biochemistry, or molecular biology. Preference will be given to applicants with work experience in starch, acrylamide or agarose gel electrophoresis, DNA/RNA extraction, gel transfer, and hybridization.

The successful applicants will join a genetics and plant breeding team using molecular markers to fingerprint germplasm and to study quantitative traits in plants.

Salary and benefits will be competitive. Please send your résumé including a description of relevant experience, names, addresses and telephone numbers of two references to:

Dr. Alex L. Kahler
Garst Seed Company
P.O. Box 400
Des Moines, IA 50304

The Garst Seed Company is an Equal Opportunity Employer.

RESEARCH PROGRAM DIRECTOR CARDCIOVASCULAR

CytRx Corporation, a development stage public company, has an immediate opening for a Ph.D. pharmacologist/toxicologist with experience in developing cardiovascular therapeutics. Must have knowledge of all aspects of preclinical development of pharmaceuticals as well as laboratory management skills. Candidates should be self-motivated independent scientists with two or more years of postdoctoral experience in any of the following areas: antiplatelet agents, hemorhogly, thrombosis, or vascular biology. CytRx offers a stimulating research environment with opportunity available for academic collaborations and scientific publications. Please send your current curriculum vitae to: Dr. Len Herron, CytRx Corporation, 150 Technology Park-Way, Technology Park/Atlanta, Norcross, GA 30092.

The Division of Endocrinology of the Department of Medicine at the University of Washington and the Seattle VA Medical Center are recruiting an individual to serve as RESEARCH SCIENTIST at the assistant or associate professor level. The candidate should be a Ph.D., with strong research training and productivity, particularly in molecular/cellular endocrinology with relevance to reproductive or neuroendocrinology. The VA and University of Washington are Equal Opportunity Employers. Women, Hispanics and other minorities are encouraged to apply. Send curriculum vitae to: William J. Bremner, M.D., Ph.D., Chief, Medical Service (111), VA Medical Center, 1600 South Columbian Way, Seattle, WA 98108.

RESEARCHER

Full-time tenured or tenure-track faculty research position available. Engineering or physical science graduate, Ph.D. or ABD required, dental and/or orthodontic training or experience required. Experience in research and/or development and in design, prototyping, and construction of research and development equipment is desirable. Rank and salary commensurate with training and experience. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and members of underrepresented curricula. Send curriculum vitae to: Dr. T. Michael Spidel, Chairman, Department of Orthodontics, University of Minnesota, School of Dentistry, 340 Moore Tower, 515 Delaware Street S.E., Minneapolis, MN 55414.

RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology Research and the Microbial Genetics Division at Pioneer Hi-Bred International, Inc., are seeking applicants for the positions listed below. Successful candidates will be expected to interact extensively with other disciplines in the transformation, gene isolation, and elucidation of the mode of action of agronomically useful microorganisms. Pioneer offers competitive salaries, excellent facilities, and a highly cooperative research environment.

ANALYTICAL BIOCHEMIST

Experience with analytical instrumentation such as GC, HPLC, mass spectrometry, etc., and laboratory automation. She/he should also have experience in natural products and nuclear acid chemistry, and be capable of working independently with a high personal level. The candidate should have the equivalent of a Ph.D. plus several years of postdoctoral experience.

BIOCHEMIST

A strong background in protein purification, enzymology, and metabolism is desired. Expertise in immunochemistry would be an asset. Proven ability to carry out independent biochemical research is essential, as is the willingness to collaborate and contribute to a diverse range of projects. The candidate should have the equivalent of a Ph.D. plus postdoctoral research experience in biochemistry or a related discipline.

CELL CULTURE RESEARCH TECHNICIAN

Previous tissue culture experience is desirable, but not essential. Planning, writing, and revising experiments in conjunction with the laboratory manager will be expected. Other responsibilities include supervising part-time employees and assisting other research projects in the department. A 4-year degree in the biological sciences or equivalent is a minimum requirement. Pioneer Hi-Bred International is an Equal Opportunity Affirmative Action Employer. Indicate for which job you are applying, and send resume with at least three references to:

Lisa Wilson
Pioneer Hi-Bred International, Inc.
700 N.W. 62nd Avenue, P.O. Box 38
Des Moines, IA 50323

SALIVARY GLAND PHYSIOLOGIST: Applications are invited for a tenure-track, assistant professor position in the Department of Dental Research at the University of Rochester. Qualifications include a Ph.D. and/or a Ph.D., at least 2 years of postgraduate training in physiology or biochemistry and extensive knowledge of salivary gland physiology or a closely related area. The successful candidate will have shown some success in obtaining grant support, should develop a strong research program, participate in interdepartmental, collaborative research, and have strong graduate courses. A commitment to achievement in research and teaching is essential. Please send a statement of research interests, curriculum vitae, and three letters of support to:

Dr. Robert E. Bauk, Jr.
Department of Dental Research
University of Rochester School of Medicine and Dentistry
601 Elmwood Avenue
Rochester, NY 14642
An Equal Opportunity Employer. Closing date for applications is 1 February 1988.

SCIENCE/BIOLOGY: The Math, Science, and Technology Cluster, Department of Learning and Teaching, Graduate School of Education, Rutgers, The State University of New Jersey, is conducting a search for a FACULTY MEMBER with expertise in the teaching of the biological sciences. Course work at both the secondary and elementary school levels will be involved although the position will stress college education. Experience will be placed upon the organizational development of contemporary knowledge in the sciences. Responsibilities will include developing graduate course offerings, conducting research, teaching graduate and undergraduate courses related to science education, and advising graduate students. A Ph.D. for the position is required. Rank: assistant professor. Candidates should possess a Ph.D. or M.S. in education (science), and at least 2 years of postdoctoral experience. The successful candidate will have demonstrated excellence in teaching the biological sciences and in research. Experience with cell and tissue culture techniques would be highly desirable. Interested individuals should send curriculum vitae, a complete bibliography of research, and three letters of recommendation, and a brief description of current and future research activities to:

David T. Scott, Ph.D.
Professor and Chairperson
Department of Anatomy and Cell Biology
Eastern Virginia Medical School
Norfolk, VA 23501
Opportunities for Protein Chemists

Genentech, Inc., a leader in the field of biotechnology, has a strong commitment to a new department in research to work on state-of-the-art purification and sequence determination of novel proteins.

The success of this group will require the addition of personnel at all levels including Postdocs, Scientists, Senior Scientists, and a Director at the Ph.D. level who have a proven record of innovative and productive research in this area. Senior Scientist level individuals will be expected to establish and lead teams to support the efforts of the group to become a leading force in this field.

Positions will also be available for Research Assistants and Associates with a BS or MS in Biochemistry, Chemistry or related degree. Experience in protein purification, especially high resolution techniques such as FPLC, HPLC, as well as two-dimensional gel electrophoresis and tissue culture would be helpful.

Genentech offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send your curriculum vitae, a summary of your research interests and three letters of reference to Dr. Bart Aggarwal, Senior Scientist, Protein Chemistry Department, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

R & D Opportunities

Baxter Healthcare Corporation, MicroScan Division develops and manufactures computer controlled electronic instrumentation and disposables used in the clinical laboratory. Research involves systems dealing with rapid identification and susceptibility testing.

Our recent growth and expansion has created several opportunities in our Research & Development Department. The positions start at a BS level and progress through to a postdoctoral requirement. Experience varies from entry-level to 6+ years in a research/industrial environment. Background qualifications also vary and require experience in nucleic acid chemistry, microbiology, biochemistry, and molecular biology. Experience in assay development, enzymology, and non-radioactive detection is a plus.

Baxter Healthcare Corporation, MicroScan Division is a leader in the healthcare industry and we offer excellent salaries and benefits. If your education, experience and expertise fall within our requirements, please submit your resume and current salary to: Vice President of Human Resources, Baxter Healthcare Corporation, MicroScan Division, 1584 Enterprise Blvd., West Sacramento, California 95691. We are an equal opportunity employer.

MicroScan Division

Baxter

RESEARCH OPPORTUNITIES IN 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 Biotechnology Laboratory in the Central Research Department for qualified researchers in the area of HYBRIDOMA TECHNOLOGY.

The successful candidate will have a Ph.D. in immunology, microbiology or a related discipline and experience in hybridoma technology. Familiarity with state-of-the-art discovery of monoclonals, immunoassays and immunochemistry is desired. Research efforts will be directed toward obtaining 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. Send resume to: Technical Recruiting Department H-2 P.O. Box 1655 Midland, MI 48641-1655

The Dow Chemical Company is an Equal Opportunity Employer.
TEACHING OVERSEAS: The Department of Biology at the American University of Beirut, Beirut, Lebanon (AUB), invites applications for faculty positions at the level of ASSISTANT PROFESSOR, available 1 October 1988 in the following fields: developmental genetics and molecular biology; animal cell physiology, botany and ecology, invertebrate zoology. Applicants should be eligible and will be expected to engage in both teaching and research. Ap- pointments are normally made for a 3-year period. Interested persons should send their curriculum vitae and three letters of recommendation to: Dr. Jaroslav Farkas, Department of Biology, AUB, P.O. Box 95, Beirut, Lebanon. AUB is an Equal Opportunity/Affirmative Action Employer.

HARVARD UNIVERSITY

The John F. Kennedy School of Government seeks a TENURED PROFESSOR in the field of science and international affairs. Candidates should be strong teach- ers with distinguished scholarly records in international security, capable of developing and managing collabora- tive research projects. Send curriculum vitae to: Pro- fessor Harvey Brooks, John F. Kennedy School of Government, 79 JFK Street, Cambridge, MA 02138. Harvard University is an Affirmative Action/Equal Opportunity Employer.

TWO TENURE-TRACK FACULTY POSI- TIONS for August 1988 at assistant/associate professor level in biochemistry and organic chemistry. Ph.D. re- quired; postdoctoral experience desirable. Teaching at graduate/undergraduate levels. Active research program expected. Research specialization is open. Send curricul- um vitae, transcripts, research plans, and three letters of reference to: L. Keller, Department of Chemistry, Florida International University (FIU), Miami, FL 33199. Closing date: 11 February 1988. FIU, The State University of Florida at Miami has an enrollment of 17,000 students. A new master's program in chemistry is in place; a new chemistry/physics building to open in 1990. FIU is an Affirmative Action/Equal Opportunity Employer.

VEGETABLE/MUSHROOM ENTOMOLO- GIST. ASSISTANT PROFESSOR OF ENTOMO-LOGY. TENURE TRACK, 12 months. Extension re- sponsibility in vegetables, mushrooms; research responsi- bility in entomology and vegetable science discipline. Experience in IPM and information delivery technologies. Application deadline: 1 March 1988, or until a suitable candidate is found. Send curriculum vitae, transcripts, research plans, and three letters of reference to: C. W. Kitts, Head, Department of Ento- mology, 811 South University Drive, P.O. Box 1064, Pennsylvania State University, University Park, PA 16802. An Equal Opportunity/Affirmative Action Employer.

GRADUATE TRAINING PROGRAM

GRADUATE TRAINING PROGRAM IN EXPERIMENTAL PATHOLOGY

The Experimental Pathology Program at the University of California, San Diego, has graduate fellowships available in September 1988. This interdepartmental program places a particular emphasis on understanding the molecular mechanisms of human disease. Research areas include viral carcinogenesis and oncogenes (G. Walter; J. Lipick), molecular basis of retinoblas- toma (W.-H. Lee), virus-induced autoimmune disease (R. Fujimani), mechanisms of signal transduction (J. Feramisco), DNA repair and mutational repair (P. AIDENBERG; W. J. DICK), differentiation of African trypanosomes (C. Davis), and cardiovascular disease (C. Bloor). This Ph.D. pro- gram is open to students with a Bachelor's degree who wish to enter medical research without becoming physi- cians, and also to those with an M.D. Further informa- tion and application forms available from: Dr. J. Lipick, Department of Pathology M-012, University of Cali- fornia, San Diego, La Jolla, CA 92039.

ASSISTANTSHIPS

GRADUATE TRAINING PROGRAM IN NEU- ROSCIENCE—The Neuroscience Program at The Milton S. Hershey Medical Center, The Pennsylvania State University has assistantships available in August 1988. This interdepartmental program is designed to confer a Ph.D. in neuroscience after 4 years of study. Participating faculty have established research programs in molecular biology of the nervous system, neuroendocrinology, neuroanatomy, behavioral neurophysiology, and neuropharmacology, neurobiology, and cerebral blood flow and metabolism. Interested candi- dates are invited to apply to: Dr. Robert Page, Chairman, Neuroscience Program, The Milton S. Hershey Medical Center, The Pennsylvania State University, P.O. Box 850, Hershey, PA 17033. An Equal Opportuni- ty/Affirmative Action Employer.

GRADUATE PROGRAM

CARNegie Mellon University

GRADUATE STUDY IN ENGINEERING AND PUBLIC POLICY (EPP). The EPP Graduate Program leads to a research-based Ph.D. specializing in policy issues in areas such as: telecommunication, computer and computer networks, design and application of conventional and AI-based computer systems for policy analysis and decision support; mathematical mod- eling for policy and decision making; international economic and political issues of peace and international security; and analysis of labor markets. Applicants must hold a Bachelor's degree from a Carnegie Mellon University, including the following departments: electrical engineering, physical sciences, or mathematics. Education or experi- ence beyond the Bachelor's degree is desirable. Contact: Dr. Indira Nair, Engineering and Public Policy (EPP), Carnegie Mellon University, Pittsburgh, Pennsylvania, 15213. Carnegie Mellon University is an Affirmative Action/Equal Opportunity Institution.

PROGRAMS

DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHO- OLOGY. Interdisciplinary program seeks qualified candi- dates interested in fundamental molecular and cellular biology and its application to disease. Stipends of $9000 available on a competitive basis. Contact: Director, MCBP Program, College of Graduate Studies, Medi- cal University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

Medical University of South Carolina (MUSC) offers PROGRAMS leading to Ph.D. and M.D./Ph.D. de- grees in each of the basic biomedical sciences (anatomy, biochemistry, biometry, microbiology and immunology, pharmacology), medical science, pharmaceutical sciences, and molecular and cellular biology/medi- cine; $9000 assistantships available to highly qualified students. Application deadline: 15 March. Contact: Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425.

M.S. DEGREE IN APPLIED MOLECULAR BIOLOGY

The University of Maryland Baltimore County offers a 2-year, highly laboratory-intensive program leading to a Master's degree in Applied Molecular Biology. The program in which the biotechnology companies partici- pate, is designed primarily to supply highly qualified research personnel for industry. Formal laboratory courses, electives to this program, are designed around current medical and biological research interests, both in the laboratory and in the classroom. For additional information contact: Dr. Richard E. Wolf, Jr. AMB Program Director Biological Sciences Department University of Maryland Baltimore County Catonsville, MD 21228

TRAINING PROGRAM

TRAINERSHIPS. Medical Scientist Training Program offers $9000 stipends for studies leading to com- pletion of M.D./Ph.D. degrees in each of the basic biomed- ical sciences and molecular and cellular biology/medicine. Contact: Director, Medical Scientist Training Pro- gram, College of Graduate Studies, Medical Universi- ty of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

HOW TO MAKE MICROCAPSULES—A HANDS ON COURSE

A laboratory course designed to teach the art and science of microcapsule making. Suitable for biologists, pharmacists, chemists, life scientists and engineers. En- rollment limited to 12. Lectures and laboratory sessions by Dr. Curt Thiers, Professor of Chemical Engineering at Washington University in St. Louis. Spring session: 27 to 30 March 1988, and 17 to 20 April 1988. For information call: 314-899-6066.

TRAVEL GRANTS

TRAVEL FUNDS, REGEM 1

Travel funds are available through the American Socie- ty for Microbiology for the First International Confer- ence on Genetically Engineered Microorgan- isms (REGEM 1), 5 to 8 April 1988, Cardiff, Wales. Awards will be for 80% of economy airline from the United States to Wales, up to $700 per award. Application should be received by 25 January 1988. For more information, contact: Robert D. Watkins, ASM Head- quarters, 1131 1st St, NW, Washington, D.C. 20006, at 202-533-0460.

TRAVEL GRANTS

XVIII International Congress of Entomology, Van- couver, Canada. G. G. E. Scudder, Secretary-General, Department of Insect Science, University of British Columbia, V6T2A9 Canada. Partial travel grants are available Send four copies of application (curriculum vitae, abstract if proposed contribution, and other pertinent information) by 7 February 1988, to: The Execu- tive Director, Entomological Society of America, 4603 Calvert Road, College Park, MD 20740.

FELLOWSHIPS

FELLOWSHIPS IN REPRODUCTIVE BIOLOGY

NIH training grant and individual investigator grants provide stipends for pre- and postdoctoral fellows interested in cellular, molecular and neuroendocrine regula- tion of reproductive processes. Participating faculty from the Departments of Biochemistry and Cell Biology: Alfred Essig; K. L. Backer (mechanisms of hormone action); S. S. Chilton (steroid actions in the cervix); A. W. Coqeslin (neural regulation of gonadotropins); C. W. Garn (hormone action in the uterus); J. C. Mason (testicular steroid metabolism); W. W. Griffin (hormone receptors and progestin action); G. H. Little (pro- grammmed cell death in development); R. L. Norman (neuroendocrine and reproductive physiology); C. D. Scudder; H. M. Wee (blastocyst-uterine interactions); S. M. Whee (estrogen mechanisms in the uterus). For additional information contact: an appropriate member above concerning your interest in a specific area or C. W. Garn, Chairman of the Selection Committe, Biochemistry Department, Texas Tech University Health Science Center, Lubbock, TX 79430. TTXHSC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS in gastroentero- logical research available for 1 or 2 years beginning 1988. Research projects focus multidisciplinary approach using bio- chemical, immunological, physiological and electrophysio- logical techniques. Applicant may focus on either clinical or basic studies depending on project desired. The Ph.D. send curriculum vitae, and names of three references to: N. F. LaRusso, M.D., Program Director, NIH Training Program, Mayo Clinic, 200 First Street, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL FELLOWSHIPS in cardiovas- cular research available in the FASEB (NIH) for train- ing in the departments of biochemistry, pharmacology, and physiology are available for qualified applicants with either M.D., M.D./Ph.D., or M.D. who desire advanced training in cardiovascular research. For more informa- tion contact: Dr. J. E. Chimoskey, Department of Physiology, Michigan State University, East Lansing, MI 48824. FASEB is an Equal Opportunity/Affirmative Action Employer.
Postdoctoral Fellows & Research Associates
Pharmacological Sciences Dept.
Genentech, Inc.

Genentech, Inc., a leader in the field of biotechnology currently seeks the following:

Postdoctoral Fellows
Positions are available immediately for postdoctoral fellows to work in the area of growth factors. The research will involve investigations of the physiology/pharmacology of neuro-endocrine substances and other hormones.

The successful candidate will have a strong background in biochemistry and biochemical techniques, and a keen interest in endocrinology. The duration of the postdoctoral appointment will be two years with the possibility of extension. Please send your curriculum vitae, 3 references and a short summary of research interests.

Research Associates
Biochemistry
Responsibilities will involve performing biochemical techniques such as HPLC, gel chromatography, affinity chromatography, enzyme conjugation, ELISAs and radioiodination. Experience with molecular biology techniques, i.e. Western blots and Northern blots preferable. A background in endocrinology would be an added attribute.

This position requires a Bachelor of Science or a Masters degree in biochemistry or related field and 2-5 years' laboratory research experience in the above areas. The candidate needs to be a self starter able to work with minimal supervision.

Research Associates
Endocrinology
In this position, responsibilities will include design and implementation of experiments and analysis of data that will contribute to a variety of projects concerning hormone characterization and hormone action.

The successful candidate will have a background in cell culture, genomic library construction, measurement of transcription rate, in-situ hybridization, hormone receptor assay, gene expression, and radiimmunoassay. Ability to work quickly and accurately with a variety of techniques and instruments and to work with several scientists and on several projects simultaneously is a key qualification. A Master's degree specializing in molecular biology or endocrinology with a strong emphasis on scientific research along with two years of relevant laboratory experience is preferred. Educational and training background in endocrinology is desired. Experience in other related field such as molecular biology is helpful.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume to: Sherrie B. Wilkins, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

BIOTECHNOLOGY RESEARCH OPPORTUNITIES: SENIOR RESEARCH SCIENTISTS

CENTOCOR, a leading independent biopharmaceutical company located in suburban Philadelphia has excellent opportunities available for qualified senior individuals with experience in monoclonal antibody technology to work in an exciting and expanding research and development environment.

IMMUNOLOGIST/ MICROBIOLOGIST
Responsibilities include development of In Vitro and In Vivo methods to evaluate monoclonal antibodies with antibacterial or anti-viral properties. Ideal candidate should have a Ph.D. in Immunology/Microbiology with a minimum of 4 years of research experience in infectious disease model systems. Strong analytical skills in Microbiology/Virology and Protein Chemistry required.

CELL BIOLOGIST
Supervise and support the production of new mammalian hybridomas and develop methods to maintain hybridoma stability and amplify antibody production. Candidate should possess a Ph.D. in Cell Biology, Immunology or equivalent with a minimum of 4 years' postdoctoral experience in mammalian hybridoma cell culture.

PROTEIN BIOCHEMIST
Responsibilities include the development of innovative methods for antibody purification and characterization. Should possess a Ph.D. in Biochemistry or related field, with a minimum of 4 years of related postdoctoral or industrial experience. Experience with standard biochemical techniques and instrumentation is essential. Familiarity with monoclonal antibodies and immunoassay development desirable.

Excellent salary and benefits program accompany these positions at our modern Research & Development facility. Positions provide significant potential for professional career growth and management level responsibilities. Reply in confidence with curriculum vitae and summary of relevant experience indicating the position desired to: Peter E. Daddona, Ph.D., Director, Immunobiology R&D, Centocor, Inc., 244 Great Valley Parkway, Malvern, PA 19355. NO PHONE CALLS PLEASE.

EOE

CENTOCOR
FELLOWSHIPS

ELECTROPHYSIOLOGISTS
POSTDOCTORAL FELLOWSHIPS

1) Preferably with brain-slice experience, to work with Ron Sheng and Yosi Yaron, studying mechanisms underlying neuronal death and mapping calcium transients in single neurons [J. Physiol. 389, 319 (1987)]. Up to 4 years of support available.

2) For PhD degree with Peter Hillman on biophysics of transduction in photoreceptors. Experience in intracellular recording, data analysis and computer modeling desirable. Late 1- to 2-year appointment.

Well-equipped laboratory facilities. Send application, curriculum vitae, list of publications, Bitter node, and names of three references. Professor P. H. Hillman, Department of Neurobiology, Institute of Life Sciences, Hebrew University, Jerusalem, 91904, Israel.

The Institute of Ecosystem Studies (IES) of the New York Botanical Garden will award one IES SUMMER RESEARCH FELLOWSHIP for a 3-month period during summer 1988. These awards provide short-term research opportunities for Ph.D.'s to do ecological research as part of the IES program at the Mary Flagler Cary Arboretum in Millbrook, New York. A diversity of terrestrial, wetland and stream habitats, as well as excellent laboratory facilities, is available on the 779-hectare site. Award provides summer stipend plus limited funds for research supplies. Application should be submitted by 1 March 1988 to: Dr. Jonathan J.Cole, Institute of Ecosystem Studies, The Mary Flagler Cary Arboretum, Box AB, Millbrook, NY 12546. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP—Ph.D. in a biological science or equivalent with experience working with Ca2+-ATPase. Protocols for purification and use in tissue culture. Ability to work independently and to actively participate in the design of experiments. The University of North Carolina at Chapel Hill (Equity/AA/Executive Access). Equal opportunity employer and women and minorities are encouraged to voluntarily identify themselves. Please send curriculum vitae and name of three references to: Gilbert C. White, II, Center for Thrombosis and Hemositosis, UNC-Chapel Hill, 435 Burnett Womack Building 229H, Chapel Hill, NC 27514.

POSTDOCTORAL FELLOWSHIP—Ph.D. in a biological science or equivalent with experience working with molecular biology techniques, cloning techniques, DNA sequencing, preparation of DNA and genomic libraries, protein expression and cloning and express membrane glycoproteins with human platelets. Ability to work independently and to actively participate in the design of experiments. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and women and minorities are encouraged to voluntarily identify themselves. Please send curriculum vitae and name of three references to: Gilbert C. White, II, Center for Thrombosis and Hemositosis, UNC-Chapel Hill, 435 Burnett Womack Building 229H, Chapel Hill, NC 27514.

FELLOWSHIPS FOR RESEARCH AND TRAINING IN ECOLOGY
UNIVERSITY OF MICHIGAN

BIOMEDICAL SCIENCE

15 JUNE TO 15 AUGUST 1988

Advanced undergraduate or graduate students and researchers are invited to apply for fellowships in the Naturalist-Ecologist Training Program at the Biological Station in northern Michigan. All participants conduct independent ecological studies. Students enroll in one course of study at a time and must register in another, Merith Ecological Research. The latter emphasizes hands-on experience on the fundamentals of experimental design, data analysis, and interpretation of results. AllData is then fed into the computer for data analysis. Students are encouraged to develop independent research projects. The University of Michigan is an Equal Opportunity/Affirmative Action Employer and women and minorities are encouraged to voluntarily identify themselves.

Please send curriculum vitae and name of three references to: Dr. R.M. Wabl, Program Director, University of Michigan Biological Station, 435 Burnett Womack Building 229H, Chapel Hill, NC 27514.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP UNIVERSITY OF ALABAMA AT BIRMINGHAM

Applications are invited for postdoctoral fellowship in the Department of Pediatrics. Responsibilities include studies of latency, virulence and molecular pathogenesis of herpes simplex virus. The candidate must have a Ph.D. degree and be familiar with tissue culture technique, virus cultivation, recombinant DNA technology, and immunoblotting. Experience with laboratory animals is desirable, but not essential. Candidates should submit applications including curriculum vitae and two references to: Richard J. Whiteley, M.D., Clinical Virology, Department of Pediatrics, University of Alabama, Children's Hospital Tower, Suite 653, 1600 7th Ave South, Birmingham, AL 35294.

POSTDOCTORAL FELLOWSHIPS IN BIOMEDICAL NUTRITION

We announce the availability of postdoctoral positions in the Division of Nutrition of the Department of Physiology and Biochemistry. Preceptors and areas of research include: P. Macke Consigny (vascular function and atherosclerosis), Frederick DeMartinis (adipose growth and development), Edward A. Fisher (apolipoprotein gene expression), Earl L. Harrison (ozone injury), Juan L. Mariñas (regulation of lipoprotein synthesis, nephrosis), A. Catherine Ross (retinoids, cellular lipoprotein metabolism of liver, serum lipoprotein metabolism). Application should be submitted by 1 March 1988 to: Dr. Jonathan J. Cole, Institute of Ecosystem Studies, The Mary Flagler Cary Arboretum, Box AB, Millbrook, NY 12546. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR MEDICINE AND IMMUNOLOGY

Areas of interest include mucosal immunity, mechanisms of immunoglobulin, isotype commitment, cellular biology, and molecular mechanism of action of certain lymphokines and colony-stimulating factors. Thomas B. Tomasi, M.D., Ph.D., Chairman, Department of Molecular Medicine and Immunology, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, NY 14263.

POSTDOCTORAL POSITION


POSTDOCTORAL RESEARCH FELLOWSHIP

A postdoctoral position is available immediately to study molecular mechanisms of chemoprevention both in vivo and in vitro. The applicant should have background and experience in protein chemistry and enzymology, hold a Ph.D. degree (preferred), and be a U.S. citizen or have immigrant status. Please send curriculum vitae and the names and addresses of two academic and/or research references to: Dr. Leon Milewich, The University of Texas Southwestern Medical Center at Dallas The Cecil H. and Ida Green Center for Reproductive Biology Sciences 5523 Harry Hines Boulevard Dallas, TX 75235-9081

The University of Texas is an Equal Opportunity/Affirmative Action University.
UNIVERSITY OF MISSOURI-COLUMBIA

OPPORTUNITIES FOR PRE AND POSTDOCTORAL TRAINING IN MOLECULAR BIOLOGY

Expansion of multiple research programs at the University of Missouri-Columbia provides new opportunities for training in a variety of disciplines using biomolecular approaches to understanding life processes. Stipends are now offered for highly qualified trainees to participate in interdisciplinary programs in Molecular Biology, Microbial Pathogenesis, Plant Biotechnology and Reproductive Biology.

MOLECULAR BIOLOGY PROGRAM
The Molecular Biology Program at the University of Missouri-Columbia offers predoctoral and postdoctoral fellowships in Molecular Biology and related disciplines. The predoctoral fellowships are renewable for up to 4 years, and provide a stipend of $12,000 per year in addition to a waiver of all tuition and fees. The postdoctoral fellowships provide a stipend of $20,000 per year plus fringe benefits for up to 2 years. Faculty in this campus-wide interdisciplinary program are drawn primarily from the Departments of Biochemistry, Biological Sciences, Microbiology, and Veterinary Microbiology, as well as a variety of other participating divisions. All share a common interest in studies of the molecular basis of biological processes. The multidisciplinary nature of the overall program provides depth as well as breadth in training. The program fosters close scientific interaction among faculty, postdoctoral fellows, and graduate students interested in all aspects of molecular biology. Candidates may address inquiries directly to the Molecular Biology Fellowship Committee, and should indicate the department and subject area(s) related to their research interests. Inquiries and completed applications should be made as soon as possible. Further information on the program and its faculty can be obtained by contacting:

Michael L. Misfeldt, Ph.D.
Molecular Biology Fellowship Committee
M642 Medical Sciences Building
University of Missouri-Columbia
Columbia, Missouri 65212

REPRODUCTIVE BIOLOGY
The Interdisciplinary Group in Reproductive Biology at the University of Missouri has available several graduate and postdoctoral fellowships supported by the University's program, "Food for the 21st Century". These positions may be held in one of several departments within the Colleges of Agriculture, Veterinary Medicine, Arts and Sciences, and Medicine. The emphasis in training is basic research, particularly in the areas of molecular biology, protein biochemistry, endocrinology, embryo manipulation, genetics, and behavior, which might ultimately lead to improvement in the reproductive efficiency of farm animals. Candidates should submit complete resumes, GRE scores, and three letters of reference as soon as possible.

B.N. Dey, Ph.D.
Department of Animal Sciences
159 Animal Sciences Research Center
University of Missouri-Columbia
Columbia, Missouri 65211

TRAINING PROGRAM IN MOLECULAR ASPECTS OF MICROBIAL PATHOGENESIS
The University of Missouri-Columbia announces a NIH supported training program for predoctoral and postdoctoral candidates in areas pertaining to the molecular aspects of microbial pathogenesis. Faculty in the Departments of Microbiology, Biochemistry, Medicine, and Biological Sciences participate as preceptors for research training in areas including, but not limited to: developmental biology of nematodes, immunoregulation, oncogene structure and function, near-ultraviolet radiation effects on bacteria, bacterial toxins, bacterial-host interactions, malarial antigens, tumor immunology, genetic organization and regulation of iron transport systems in bacteria, growth factors, T cell activation, virus gene structure and expression, membrane topology and gene expression in mycoplasma, antibiotic resistant plasmids, autoimmune mouse models, and vaccine development. Trainees will benefit from interactions with the interdisciplinary campus-wide program in Molecular Biology. Candidates are also sought to pursue a combined degree program leading to the Ph.D. in Microbiology and the M.D. For more information about specific research programs and application forms, contact:

Michael L. Misfeldt, Ph.D.
Department of Microbiology
School of Medicine
M642 Medical Sciences Building
University of Missouri-Columbia
Columbia, Missouri 65212

NATIONAL NEEDS GRADUATE FELLOWSHIPS
PLANT BIOTECHNOLOGY
The Interdisciplinary Plant Group of the University of Missouri has been awarded a grant from the Higher Education Program of the Cooperative State Research Service, U.S. Department of Agriculture providing for a number of graduate fellowships with a $15,000 per annum stipend. Fellowships will be competitive. To insure consideration, candidates must submit GRE scores, transcripts, three letters of reference, and curriculum vitae by February 1, 1988. Other fellowships and research assistantships are also available. Send program information requests and application to:

Interdisciplinary Plant Group
c/o Douglas D. Randall, Ph.D.
117 Schwitzer Hall
University of Missouri-Columbia
Columbia, Missouri 65211

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