POSITIONS OPEN


ASSISTANT PROFESSOR. Applications are invited for a tenure-track position. Applicant must have an earned doctorate in microbiology, molecular biology, poultry science, animal science, or closely related area. The successful candidate will have a joint teaching (30%) and research (70%) appointment. Salary and benefits are competitive. Responsibilities include: developing and teaching courses in microbiology, poultry science, animal science, or related field; participating in research projects; and providing service to the University. Applications should be submitted to: Dr. K. R. Robbins, Professor and Head, Department of Biology, University of Tennessee, Knoxville, TN 37901-1071. Telephone: 615-974-7286. Applications accepted until 28 September 1990. The University of Tennessee is an Equal Opportunity/ Affirmative Action Employer.

The University of California San Francisco seeks a Board-certified/preliminary pediatrician at the ASSISTANT PROFESSOR IN RESIDENCE level, with a major commitment to research, for the Division of Infectious Diseases; clinical and teaching duties will require 20% to 40% time. The individual will have expertise in molecular biology, and specific experience in phospholipid binding proteins and polymorphonuclear leukocyte degranulation. Early stages of a laboratory are needed for this position. Contact in writing: Dr. Steve Kohli, San Francisco General Hospital, 669, 1001 Potrero Avenue, San Francisco, CA 94110. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT OR ASSOCIATE PROFESSOR, PLANT VIROLOGY

The University of Arizona invites applicants for a tenure-track assistant or associate professor position with research (75%) and teaching (25%) responsibilities. A Ph.D. in plant virology or closely related field is required. The successful candidate will be expected to develop an extramurally funded research program in plant virology. The specific area is unrestricted. Applicants should submit curriculum vitae, three letters of recommendation, copies of three recent publications, and a statement of research interests to: Chair, Plant Viral Diseases Faculty Search Committee, Division of Plant Pathology, University of Arizona, Tucson, Arizona 85721. An Affirmative Action/Equal Opportunity Employer.

ASSOCIATE PROFESSOR OR PROFESSOR. Tenure-track, 12-month position, requiring approximately 50% research, 10% teaching, and 40% administrative duties. The successful candidate will assist the associate director in administering a broad research and teaching program and develop a research program in one of the following areas: composites, wood quality enhancement, or wood chemistry and biotechnology. Qualifications: earned doctorate in wood science and technology, chemical engineering, or related field, demonstrated leadership ability, and communication skills are desired. Application deadline: 31 May 1990 or until suitable candidate is found. Submit a letter of application stating career goals, reprints, and resume, and have four letters of recommendation sent to: M. R. Nelson (Telephone: 602-621-1828), Department of Plant Pathology, Forbes 104, University of Arizona, Tucson, AZ 85721. An Affirmative Action/Equal Opportunity Employer.

The Department of Surgery at the University of Pittsburgh School of Medicine is seeking a candidate at the assistant/associate professor level to join a newly established Section of Surgical Neurology and Tumor Immunology. Applicants should have a Ph.D. in immunology along with vast knowledge and experience in immunology and neurology. The position is located in a co-operative effort in a basic science field, depending upon experience. We offer a competitive salary, including curriculum vitae and bibliography, should be sent to Richard L. Simmons, M.D., Department of Surgery, University of Pittsburgh, 497 Scaife Hall, Pittsburgh, PA 15261.

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

ASSISTANT/ASSOCIATE PROFESSOR. The newly established Division of Neurosurgery in the Department of Surgery at the University of Colorado is seeking applicants for tenure-track or associate professor position. The objectives of the Division are to terminate fundamental research in basic mechanisms in neurology and to provide diagnostic and treatment services. Research interests should focus on molecular biology, cell biology, amino acids, and related areas. The successful candidate should have experience in both clinical and research settings and should be interested in expanding the Division’s research program. The candidate should be interested in developing a dual appointment with the Department of Surgery and a position in another clinical department. Interested individuals should submit curriculum vitae, list of publications, and a statement of interest. Applications must be received by 30 June 1990. Affirmative Action/Equal Opportunity Employer.

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

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR, DEPARTMENT OF PATHOLOGY

The Department of Surgery at the University of Pittsburgh School of Medicine is seeking a candidate at the assistant/associate professor level to join a newly established Section of Surgical Neurology and Tumor Immunology. Applicants should have a Ph.D. in immunology along with vast knowledge and experience in immunology and neurology. The position is located in a co-operative effort in a basic science field, depending upon experience. We offer a competitive salary, including curriculum vitae and bibliography, should be sent to Richard L. Simmons, M.D., Department of Surgery, University of Pittsburgh, 497 Scaife Hall, Pittsburgh, PA 15261.

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The University of Colorado is an Equal Opportunity/Affirmative Action Employer.
Positions Open

APPLIED SCIENTISTS sought, B.S., M.S., Ph.D., for environmental and/or experience in southeastern United States. Expertise sought in botany, wildlife, wetlands, CAD, GIS, with Send resume to: Dr. F. C. Gibbons, Department, Breidlove, Dennis and Associates, Inc., P.O. Box 720037, Orlando, FL 32872-0037. An Equal Opportunity Employer.

Assistant to the Editor-in-Chief of the National Geographic

A full- or part-time position in the editorial offices of The Journal of Immunology in Bethesda, Maryland, will be available 1 July 1990. The incumbent serves as assistant to the editor-in-chief and performs editorial duties including reviewing manuscripts submitted for publication, their assignment to referees, and participation in the decision-making process concerning publication of manuscripts. Doctorate in immunology or extensive experience in immunology research required. Salary negotiable. Send curriculum vitae to: Dr. Ethan M. Shevach, The American Association of Immunologists, The Journal of Immunology, 9650 Rockville Pike, Bethesda, MD 20814, or telephone: 301-530-7178.

Biochemical Specialist/Fluorescence Instrumentation

SPEX Industries, the leader in high-performance fluorescence instrumentation, seeks candidates for the position of fluorescence support specialist. Primary duties are custom setup of fluorescent spectrometers and applications development. A strong background in molecular fluorescence and/or circular dichroism instrumentation is required along with salary requirements. Send resume, personnel requirements, RKS, SPEX Industries, Inc., 3880 Park Avenue, Edison, NJ 08820. Equal Opportunity Employer.

Biochemist

Responsible for conducting and supervising research concerning relationship between Alzheimer's disease and Down's syndrome to develop diagnostic test for early detection and cure for Alzheimer's, and other neurological problems. The laboratory team include one postdoctoral fellow and conduct research in cloning of DNA probes from Down DNA region on human chromosome 21 to determine biochemical and genetic basis of Alzheimer's disease, using COMPAG 286 computer and Denstometer machine. Also responsible for radiation protection and chemical and bacterial safety in laboratory. Ph.D. in biology and 2 years of experience in job offered or 2 years of experience as research associate/molecular biology required. Forty hours per week at $30,000 per year. Send two copies of resume to: J.O. #00451, Commonwealth of Massachusetts, Department of Employment and Training, Special Programs, Post Office, 19 Staniford Street, Boston, MA 02114.

Biologist

Stanley H. Kaplan Educational Center is seeking an M.S. biologist to research, write, and edit technical material supporting school curricula. The position requires some management responsibilities. Full benefits package; salary commensurate with experience. Send resume and cover letter to: Research Department, 810 7th Avenue, 22nd Floor, New York, NY 10019.

GC/MS Chemist (gas chromatography/mass spectrometry)

Perform physical and chemical testing on preship samples, industrial solvents, circulating solvents, environmental samples, water and wastewater, and requested sample testing. Supervise and/or train technicians; troubleshoot instrumentation, methodology, and related processes; operate GC/MS computer; operate sample extractors; and maintain such equipment as gas chromatograph, gas chromatography/mass spectrometer (model 5970), and liquid chromatograph, as well as technical documentation. Requires master's in chemistry. Experience not required but education must have included 2 years of graduate level research using high-performance liquid chromatography, gas chromatography, and gas chromatography/mass spectrometer (model 5970). Graduate education must have included one course in environmental chemistry and experience in structural determination in chemistry. Salary: $13.75 per hour; 40 hours per week, no overtime, 8 a.m. to 5 p.m., Monday through Friday. Send resume and letter to: Personnel Department, Employment Security, 401 South State Street, 3 South, Chicago, IL 60605, Attention: Joan Sykantus, Reference V-11194-S. An employer-paid ad.

Positions Open

The Marine Biology Research Division of the Scripps Institution of Oceanography, in cooperation with the United States National Oceanic and Atmospheric Administration, is seeking an experienced marine biologist to develop a Marine Mammal Program designed to study and protect marine mammals in the northeast Pacific Ocean. This position is available 1 July 1990.

Chemical Limnologist/GEOCHEMIST

The Center for the Study of New York (SUNY) at Oswego invites applications for a permanent full-time position at the Research Associate level (Ph.D required). Preference will be given to candidates with strong research potential who can establish an independent, externally funded research program and complement existing environmental programs. Experience in chemical, physical, and biological oceanography, and Great Lakes ecosystems. Extensive experience in chemical and numerical analyses and field sampling desirable. Send curriculum vitae, names of three references, and three letters of reference to: Research Associate Search, Research Center, King Hall, SUNY at Oswego, Oswego, NY 13126. Applications begin on 30 May 1990 and will be accepted until position is filled.

An Affirmative Action/Equal Opportunity Employer.

Chairman, Department of Pharmacology and Therapeutics

University of Florida GAINESVILLE, FLORIDA

Nominations and applications are requested for the position of professor and chairman of the Department of Pharmacology and Therapeutics of the University of Florida College of Medicine. The college seeks an individual who possesses and has demonstrated strong leadership abilities. The candidate should have an established and continuing record of major research productivity. The candidate should have a commitment to the further development and strengthening of the research and teaching programs of the department. Applications and nominations are invited at this time. Outstanding candidates will be considered.

Applications including curriculum vitae, bibliography, and the names and addresses of at least three references should be sent by 1 September 1990 to:

James E. McGinn, M,D., Chairman Search Committee for Pharmacology and Therapeutics Chairman, Department of Medicine University of Florida College of Medicine, J-277 Gainesville, FL 32610

An Equal Opportunity/Affirmative Action Employer.

Vice President for Botanical Science

The New York Botanical Garden

Prestigious cultural institution seeks vice president who will be responsible for planning, budgeting, and supervision of the botanical science program of about 60, including 22 Ph.D. scientists. Will serve as public spokesman for the botanical scientific program to the scientific community, the general public, and national and international organizations. Will support the botanical science program from the public and private sector.

Position requires a Ph.D. in plant sciences with strong preference for a candidate with administrative experience. Candidate must be recognized leader in botanical science with an active research program. Must have knowledge of systematic research, and economic botany. Excellent salary and benefits.

Please submit resume and letter of interest by 15 August 1990 to:

Ms. Sally Gagan, Director of Personnel
The New York Botanical Garden
Bronx, NY 10458-5126

An Equal Opportunity/Affirmative Action Employer.

Executive Director

Monterey Bay Aquarium Research Institute (MBARI)

An opening exists for an outstanding scientist with excellent administrative skills; one who can interact with an interdisciplinary group of chemists, biologists, and physical oceanographers, as well as engineers, computer experts, and administrators. The executive director is the chief executive officer (CEO) of MBARI and is expected to maintain strong interactions with the local and national marine science communities. The director should be capable of attracting funds and engineers, and of directing and motivating them to solve challenging problems. Current MBARI resources include a scientific laboratory on San Go and Moss Landing, an 110-foot research vessel, an ROV, and a scientific, engineering, and operations staff of about 50 persons. The 1990 operating budget is $7.5 million. Significant growth in facilities, staff, and budget is planned for the future.

If interested in becoming a candidate, send a letter stating your qualifications and a resume to:

Dennis A. Powers
MBARI Search Committee
Hopkins Marine Station
Cabrillo Point
Pacific Grove, CA 93950

Director, Molecular Systematics and Evolutionary Laboratory

In conjunction with the development of an interdepartmental program in systematics, the University of Arizona Division of Biotechnology invites applications for the position of director of its Molecular Biology Support Facility. Candidates should have the Ph.D. degree and professional experience in the application of molecular techniques to problems in systematics and evolutionary biology (including phylogenetic reconstruction, population, and conservation biology). The director will organize and coordinate all laboratory activities, provide technical training and advice to associated faculty and staff, and be appointed as a research scientist and will be encouraged to seek external funding for independent research. Salary will be commensurate with experience.

Application materials, including curriculum vitae, selected reprints, a statement of research interests, and names of three references, should be submitted by 15 July 1990 to: Dr. John Law, Director, Division of Biotechnology, Biological Sciences West 264, University of Arizona, Tucson, AZ 85721.

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

Gross Anatomist

The Department of Cell Biology and Anatomy at the University of Alabama at Birmingham invites applications for a tenure-earning and a nontenure-earning, 2-year position in an interdisciplinary program. The successful applicant would have training for and experience in teaching gross anatomy to medical or other health professional students. Position requires a terminal degree in biologic sciences with special emphasis on human morphology. Applicants should send curriculum vitae and three letters of recommendation to: Dr. B. E. Brickerly, Professor and Chairman, Department of Cell Biology and Anatomy, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294. (Responses must be received within 1 month of the publication date.) We are an Equal Opportunity/Affirmative Action Employer.

Wayne State University

The Department of Pathology in the Wayne State University School of Medicine desires to appoint an M.D. and/or Ph.D. to establish a research program and supervise a diagnostic laboratory in MOLECULAR BIOLOGY. Postdoctoral fellowship opportunities in training are encouraged to apply. Interested individuals should send curriculum vitae and the names of three references to: Mr. C. Freas, Department of Employment Security, 401 South State Street, 3 South, Chicago, IL 60605, Attention: Joan Sykantus, Reference V-11194-S. An employer-paid ad.

Positions Open
BS/MS
Scientists

Pulmonary Research/
Cellular Immunology

The continued expansion of our Central Research facilities at Groton, CT has created a need for additional research assistants. You will join a multidisciplinary project team engaged in research targeted at discovery of novel therapeutics for a variety of pulmonary and autoimmune diseases. The positions require a BS or MS degree or the equivalent, plus relevant experience.

**Pulmonary Research**

**Physiologist**—You will participate in a project designed to evaluate the efficacy of novel compounds on pulmonary diseases, using in vivo techniques. Relevant experience or interest in in vivo functional pharmacology, evaluation of pulmonary function and/or applied biomedical engineering is desired.

**Inflammation Cell Biologist**—You will be involved with a team investigating the mechanisms of recruitment and activation of inflammatory cells in pulmonary diseases. Relevant experience with in vivo models, tissue culture and/or immunologic methods is desired.

**Cellular Immunology**

**Cellular Immunologist**—You will perform in vitro T lymphocyte activation and signal transduction studies, investigate the role of T cell ion channels in autoimmune diseases, and determine intracellular mechanisms of immunosuppressive agents. Experience in one or more of the following laboratory techniques is desired: cellular and biochemical functional assays, cell purification, tissue culture, ELISA, radioisotopic assays, receptor binding and protein biochemistry.

Pfizer offers a stimulating scientific research environment with opportunities to interact with scientists from many disciplines. In addition, Pfizer has a competitive compensation/benefit package along with relocation assistance to this southeastern Connecticut shoreline community. Please send a resume indicating position of interest, a description of your research experience, and names of three references to: Mr. Kym Goddu, Personnel Associate, Pfizer Central Research, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.

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**Associate Director**

**Agricultural R & D - International**

Merck Sharp & Dohme Research Laboratories has an immediate opening for an Associate Director, International Pesticide Development in its Agricultural Research Department located in Three Bridges, New Jersey. This successful candidate will have responsibility for the planning and management of development programs in Japan and Europe for a class of novel natural product insecticides. Regular interactions with regulatory, marketing and operations professionals provide high visibility within the Company. The successful candidate should have a Ph.D. in entomology, agronomy, or plant pathology, 5 or more years experience in agricultural pesticide development, and a working knowledge of pesticide regulatory requirements. Excellent oral and written communication skills will be required.

Merck & Co., Inc., is a Fortune 500 Company. Its agricultural research facility is located in Hunterdon County in West Central New Jersey approximately 60 miles from New York City. Our salaries, benefits, and growth potential are excellent. Interested candidates should submit their resume with the names of three references to Mr. Michael Stephens, Merck & Co., Inc., P.O. Box 2000, WBD-365, Rahway, NJ 07065. An Equal Opportunity Employer.

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**SIGMA CHEMICAL COMPANY**

**We're Meeting The Challenge Of The 1990s with Quality**

Sigma Chemical Company is beginning a new decade of success. Backed by 40 years of experience, the future looks brighter than ever. The world's foremost supplier of research and organic chemicals as well as the leader in development of diagnostic kits and reagents, SIGMA is securely poised on the leading edge of the biomedical industry.

This dynamic field is one of the fastest growing, creative and meaningful areas of business expansion today. Throughout the 1990s, an exciting new era of research is progressing that depends on our products. To provide the quality and service this essential work demands, we offer challenging careers in:

- Immunology  
- Cell Biology  
- Tissue Culture  
- Molecular Biology  
- Protein Chemistry

To explore the opportunity in our state-of-the-art environment, send your confidential resume to: Personnel Manager, SIGMA CHEMICAL COMPANY, Position #37, P.O. Box 14608, St. Louis, MO 63178. An Equal Opportunity Employer.

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Protein/Peptide Research Scientist

NMR Spectroscopist

CIBA-GEIGY Pharmaceuticals Division is respected worldwide for its life-extending and health-enhancing products. Our commitment to research is evidenced by our investment in the most advanced analytical tools and in the accomplished professionals who utilize them.

This PhD-level Scientist will apply thorough knowledge and experience of NMR spectroscopic techniques and principles to determine the solution structures of proteins and peptides. Fully integrating a new Bruker AMX 500 and Silicon Graphics workstation into our multidisciplinary research environment will be among this scientist's major responsibilities.

CIBA-GEIGY offers competitive salaries, excellent benefits and a stimulating research environment at its 100-acre headquarters complex. Please send resume with salary history and requirements to: Al Aronson, Staffing Center, CIBA-GEIGY Corporation, Pharmaceuticals Division, Dept. LB, 556 Morris Avenue, Summit, New Jersey 07901. We Are An Equal Opportunity Employer M/F/H/N.

Science Serving Mankind

CIBA-GEIGY

Director, Tobacco-Related Disease Research Program

Office of the Vice President -Health Affairs

The University of California, Office of the President, seeks a uniquely qualified individual to manage a new Tobacco-Related Disease Research Program (TRDRP). Funded by the State of California's Cigarette and Tobacco Products Surplus Fund, the TRDRP will administer $30,000,000 annually to qualified California non-profit organizations and agencies for research into the prevention, causes and treatment of tobacco-related diseases in the areas of Cancer, Heart and Lung, and Sociobehavioral/Epidemiological/Public Health.

The Director has overall responsibility for planning, managing, coordinating and monitoring all grant and contract proposals and awards made under the TRDRP. Other involvement includes providing support and guidance to the Scientific Advisory Committee, maintaining an updated master consultant file of scientists for committees, and ongoing liaison with academic institutions, governmental bodies, professional organizations, volunteer health organizations and the public at large. This position also develops annual reports to the Legislature, and generally provides conceptual leadership with respect to the role, scope, emphasis and direction of the TRDRP.

REQUIREMENTS: Minimum qualifications include a Ph.D., M.D., or equivalent degree with demonstrable knowledge of the scientific, clinical, societal, fiscal and political issues pertaining to tobacco-related disease research. Also, substantive research experience in a relevant basic or clinical biomedical or sociobehavioral area as evidenced by publication in peer-reviewed scientific literature and in-depth familiarity with NIH peer review/grants management process. Five or more years of successful high level leadership of a major research program including at least one year of responsibility in grant solicitation, peer review and funding, and demonstrated success in interacting with a broad range of individuals and concerns germane to a highly visible and complex publicly-funded program are also required. Excellent oral and written communication skills and proven ability to organize/supervise staff.

SALARY RANGE: $74,500-$119,000 commensurate with qualifications and experience.

APPLICATIONS: Please send nominations or a letter of application, resume, and salary history by June 1, 1990 to: Director of Personnel, Screening Committee T, University Of California, Office of the President, 300 Lakeside Drive, 9th Floor, Oakland, CA 94612-3550. EOE/AA

FACULTY POSITIONS

The Yale University School of Forestry and Environmental Studies is considering making appointments at the ASSISTANT PROFESSOR rank in the following areas:

- meteorology/climatology,
- environmental chemistry, and
- geographic information systems.

The positions are available beginning 1 January 1991, and all are for an initial term of 3 years.

To apply, send a letter that includes teaching and research goals; curriculum vitae and transcripts; the names, addresses, and telephone numbers of three references; and examples of recent work to: Professor William H. Smith, Search Chair, c/o Dean's Office, Yale University, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT 06511. A complete application packet should arrive no later than 1 October 1990.

Yale University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION RETINAL MOLECULAR BIOLOGY AND BIOCHEMISTRY THE UNIVERSITY OF MICHIGAN

The Department of Ophthalmology, W. K. Kellogg Eye Center, is seeking an ASSOCIATE PROFESSOR OR FULL PROFESSOR for an immediate opening in retinal molecular biology. This position will complement a group having basic and clinical expertise in the inherited retinal dystrophies. Research experience should include retinal biochemistry and molecular biology with particular expertise in assaying and isolating plasma membrane conductance channels. A joint appointment in a related graduate department at the University of Michigan is possible. Curriculum vitae and a letter of interest with a statement of research should be forwarded to:

Paul A. Sieving, M.D., Ph.D.
Department of Ophthalmology
W. K. Kellogg Eye Center
University of Michigan
1000 Wall Street
Ann Arbor, MI 48105

The University of Michigan is an Affirmative Action Employer.

FACULTY MEDICAL TECHNOLOGY RESEARCHER AND STAFF POSITIONS

Two positions are available in the Department of Biological Sciences at Wright State University (WSU). Position one is a tenure-track position for a certified medical technologist (MTASCSP). We prefer to hire a Ph.D.-level candidate, but those with an M.S. and significant work experience will be considered. Position two is a position for a medical technologist to provide technical and educational support to the Medical Technology program. We are looking for an individual with a strong background and experience in medical technology.

The successful candidates will be expected to work closely with the Department Chair to develop and implement new curricula and programs. They will also be expected to contribute to the advancement of the Department and the University.

SALARY RANGE: $40,000-$50,000 commensurate with qualifications and experience.

APPLICATIONS: Please send nominations or applications to:

John H. Briner, Ph.D.
Department of Biological Sciences
Wright State University
Dayton, OH 45435

Applications are invited from all qualified individuals. Wright State University is an Equal Opportunity/Affirmative Action Employer.

SCIENCE, VOL. 248
The University of Sydney
AUSTRALIA

School of Biological Sciences

LECTURER IN BIOLOGY
(Eukaryotic Molecular Genetics)
Reference No. 14/02

Applications are invited for a tenurable lectureship in the area of eukaryotic molecular genetics. Preference may be given to applicants in the areas of mammalian and human molecular genetics. The appointee will be expected to teach genetics at all undergraduate levels, to establish a research programme in the area of eukaryotic molecular genetics and to supervise honours and postgraduate students. Further information from Associate Professor C.B. Gillies, Dr K.D. Brown FAX +612 692 4203.

LECTURER IN BIOLOGY
(Marine Animal Biology)
Reference No. 14/03

Applications are invited for a tenurable lectureship in the general area of marine animal biology. The appointee will undertake teaching in appropriate aspects of animal biology at all undergraduate levels. The appointee will also be expected to teach at the postgraduate level and develop research in some area of marine biology, an established area of strength in the School of Biological Sciences. Further information from Professor D.T. Anderson or Dr A.J. Underwood FAX +612 692 4119.

LECTURER IN BIOLOGY
(Plant Molecular Genetics)
Reference No. 14/04

Applications are invited for a tenurable lectureship in the area of plant molecular genetics. The appointee will be expected to teach genetics, particularly as applied to plants at all undergraduate levels, to contribute appropriately to teaching of plant science, to establish a research programme in the area of plant molecular genetics and to supervise honours and postgraduate students. Preference may be given to applicants in the areas of plant genome analysis and/or gene transfer. Further information from Professor N.A. Walker or Associate Professor C.B. Gillies FAX +612 692 4203.

Salary: Lecturer A$32,197-A$41,841 per annum.

Appointments to lectureships have the potential to lead to tenure and are usually probationary for three years.

Assistance with relocation expenses in Sydney will be provided.

Method of application: Applications, quoting reference no., including curriculum vitae, list of publications and the names, addresses and FAX numbers of three referees, to the Registrar, Staff Office, University of Sydney, NSW 2006, Australia. FAX +612 692 4316.

The University reserves the right not to proceed with any appointment for financial or other reasons.

Closing: 31 May 1990.

Equal employment opportunity is University policy

II MAY 1990

PERSONNEL PLACEMENT 759
As a $3-billion healthcare leader, we create pharmaceuticals that enhance, improve and prolong life. Our dedication to discovery has led to innovations that have won Schering-Plough top recognition around the world. We seek the talents of an experienced scientific professional with proven managerial abilities to play a leadership role at our research facility in Bloomfield, NJ.

This high profile position provides supervision for a senior level group whose collective goal is to develop models of pulmonary inflammation and formulate directions in new drug discovery. Requires a PhD in Pharmacology or related scientific discipline and a background of at least 5 years in the area of pulmonary inflammation mechanisms. Experience in all biological and inflammatory processes, as well as cytokines is desired.

We reward your achievements with an excellent salary and an outstanding benefits program. For immediate consideration, please forward your resume with salary requirements, in confidence to: Mr. R. Blackburn, Schering-Plough Research, P.O. Box DD90-27, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

What you have in mind, we put in action.
**IMMUNOLOGIST**

DNAX Research Institute is seeking a scientist to join the staff of our Immunology Department.

Candidates should hold either a Ph.D. or M.D./Ph.D. degree, and be interested in an aspect of immunology that would allow them to take full advantage of the established research strengths and unique resources of DNAX. We are particularly interested in individuals working in one of the following areas: Antigen presentation, inflammatory monokines, adhesion molecules, or *in vivo* models of cytokine function.

The successful candidate will be expected to establish an independent research program in their area of interest, and will have the opportunity to conduct basic research in the absence of teaching and grant-writing responsibilities. They will be free to work with postdoctoral fellows and to communicate their scientific findings in a manner identical to academic institutions.

DNAX Research Institute, located next to Stanford University, is committed to basic research and provides a unique opportunity for productive collaborative efforts between immunologists and molecular biologists in an academic type of environment.

Interested applicants should send a curriculum vitae and the names of three references to the Human Resources Department, DNAX Research Institute of Molecular and Cellular Biology, 301 California Avenue, Palo Alto, California 94304-1104. DNAX is an equal opportunity employer, m/f/h/v.

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**SHAPING THE MASTER PLAN**

**Florida’s Future Is Being Decided Today**

The South Florida Water Management District is a 16-county regional agency responsible for the management of water resources in the most urbanized area of Florida. The agency has direct responsibility for environmental research and management for the Kissimmee River, Lake Okeechobee and over 1 million acres of Everglades. With a staff of more than 1,200 and a budget exceeding $150 million, our agency addresses issues involving environmental protection/enhancement, water supply, flood control and water quality protection.

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**DIRECTOR, ENVIRONMENTAL SCIENCES**

We are seeking a dynamic, experienced manager with solid scientific credentials to fill the position of Director of Environmental Sciences. We are looking for a highly motivated individual with proven management, communication and interpersonal skills, and a common sense approach to environmental issues.

Our ideal candidate will hold a Ph.D. in an environmental biology field such as wetlands ecology, biological limnology, estuarine biology or systems ecology. Master’s degrees in these fields will be considered. This is a management position dealing with South Florida aquatic ecology, field experience in Florida wetlands or the Everglades is a plus.

This person will oversee the District’s ecological research, monitoring and biological data collection programs. The selected candidate will be responsible for the daily supervision of a current staff of 18, the development and administration of an annual budget, and representation of the District’s Environmental Sciences program to state and local officials as well as the environmental community.

The selected candidate will have a proven track record of increasingly responsible supervisory/management experience; a minimum of five to ten years including budget preparation and administration, program planning and project management. Solid communication and interpersonal skills are a must.

In exchange for your expertise we offer a competitive salary based on experience and an excellent benefits program. For consideration, please submit your resume to: Linda Starr, Senior Employment Representative, South Florida Water Management District, P.O. Box 24680, West Palm Beach, FL 33416-4680 or call (407) 687-6362.

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**Magainin Sciences Inc.**

An Equal Opportunity Employer
FLORIDA INSTITUTE OF TECHNOLOGY
NEARSHORE PHYSICAL OCEANOGRAPHER. A senior full-time faculty member with research and teaching interests in nearshore physical science including remote sensing, coastal and continental shelf meteorology, and hydrodynamics; will also chair marine and estuarine studies, as well as coordinate the curriculum vitae and the names of three references to: Jennifer L. Grimes, M.D., Chair, Department of Biological Sciences, Florida Institute of Technology, Melbourne, FL 32901. Telephone: 407-768-8000 ext. 8096.

FLORIDA INSTITUTE OF TECHNOLOGY

PHARMACOLOGIST/PHYSIOLOGIST. Monsanto Company is expanding its pharmaceutical research and development program in the area of pharmacology and physiology. This position requires a Ph.D. in pharmacology or physiology with experience in isolated smooth muscle, cellular, and whole-organ assay techniques. A working understanding of biochemical and molecular biology will facilitate collaborative research. This is an excellent opportunity to apply your skills to new discoveries and challenges. Please send your curriculum vitae and names of three references to: Dr. Philip Needleman, P.O. Box 3712, Research Triangle Park, NC 27709-3712.

POSTDOCTORAL ASSOCIATE. Fully funded opportunity in ongoing research utilizing site-directed mutagenesis and cellular and molecular biology. Experience in recombinant DNA techniques or enzyme structure and kinetics is preferred. Please send curriculum vitae and the names of three references to: Dr. Rob S. Driscoll, Department of Microbiology, University of Wisconsin-Madison, Madison, WI 53706.

POSTDOCTORAL ASSOCIATE. Position available to study fertilization-associated signal transduction pathways in mammalian systems. Interested candidates should have a Ph.D. degree and be fluent in recombinant DNA technology. Applications, comprising full curriculum vitae and the names of three references, should be sent by November 15, 1990, to: Dr. Alfredo M. Gallegos, Department of Cell Biology, University of California, San Diego, CA 92103.

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Opportunities for Life Scientist Ph.D.’s – Japan

The Positions
Procter & Gamble has entry level openings for life scientists with Ph.D. or postdoctoral training in the following disciplines:

- Biochemistry
- Toxicology
- Pharmacology
- Physiology
- Pharmacy
- Microbiology
- Molecular Biology
- Cell Biology

We are building a new technical center in Rokko Island, Kobe, which is expected to be completed in early 1993. These positions will be located in either our present location at Osaka or in Cincinnati, Ohio, until the new center is completed.

The Candidates
Candidates must be bilingual (Japanese and English) with excellent academic/research records and good communication skills. For non-Japanese citizens, employment is contingent upon obtaining a work visa from the Japanese government.

The Company
Procter & Gamble is a multinational, technically based corporation with $21.4 billion in worldwide sales in a wide range of household consumer products and an R&D budget of $628 million. It is the 14th largest U.S.-based corporation and was recently voted 4th most admired corporation in the U.S. by Fortune magazine.

In Japan, Procter & Gamble is engaged and rapidly growing in the research and development, manufacture, and sales of household consumer products in health and beauty care, paper, laundry and cleaning product categories. The decision to establish a technical center in Kobe recognizes Japan as a major source of product and packaging technology across the categories of interest to P&G.

Besides offering a stimulating international environment for personal and professional growth, we offer a highly competitive salary and benefits package.

Application
Applicants should send their resume and publication list to:

Dr. T. J. Logan, Manager
Japan Life Science Positions
The Procter & Gamble Company
Miami Valley Laboratories
P.O. Box 398707
Cincinnati, Ohio 45239-8707
Allow 6-8 weeks for response.

Procter & Gamble is an equal opportunity employer.
University of Massachusetts Medical Center
Director of Protein Chemistry Core Facility

Applications are invited to fill the position of Director of Protein Chemistry. Applicants should hold a Ph. D. or equivalent experience in protein chemistry and have at least 3 years of experience in peptide sequencing and synthesis. The successful applicant is expected to supervise, maintain and administrate the University of Massachusetts Medical Center Protein Chemistry Core Facility. This facility was established to serve UMMC faculty who require custom peptide syntheses and peptide sequence analyses as part of their research programs.

Title and salary will be commensurate with experience.

Send curriculum vitae, outline of scientific background and the names of three references to:

Dr. H. M. Goodman
Office for Scientific Affairs
University of Massachusetts Medical Center
55 Lake Avenue North
Worcester, MA 01655

An Affirmative Action/Equal Opportunity Employer

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HEAD DIVISION OF EPIDEMIOLOGY

The University of Minnesota invites applications and nominations for a tenured position of Head of the Division of Epidemiology in the School of Public Health. The division has a distinguished record of research and teaching and, as the largest unit with 30 faculty and 120 graduate students, plays a major role in the School.

Divisional research, with over 30 funded projects, is a healthy blend of observational and intervention studies aimed at improving public health and requiring a blend of epidemiology, biology and behavioral science. The educational program includes majors in both epidemiology and community health education. The division offers programs leading to the MPH, MS and PhD degrees, and has active post-doctoral training and Preventive Medicine residency programs.

An earned academic or professional doctorate with a minimum of 5 years leadership experience (10 years total experience preferred) in epidemiology, public health, preventive medicine or related fields. Candidates should have administrative experience, a distinguished research and teaching record, and a commitment to working creatively to develop and implement the division's and the school's activities. Faculty rank and salary will be commensurate with qualifications and background. Closing date for applications is June 30, 1990.

Applications with curriculum vitae and the names of three references should be sent to:

Professor Thomas A. Louis
The University of Minnesota
School of Public Health
420 Delaware St., SE, Box 197
Minneapolis, MN 55455

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

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Cell Biologist/ Microbiologist

Monsanto Company's Corporate Research group has an immediate opening for an experienced Cell Biologist/Microbiologist to join a world-class multidisciplinary research team working in the science of polymer membranes, bioseparations, cell culture and controlled delivery.

The candidate should possess a Ph.D. in Cell Biology, Biophysics, Biochemistry or Microbiology or equivalent. Experience in a variety of cell culture methods is required. Experience in biocompatibility, immunology and therapeutic cell culture is desirable.

For consideration, please send your resume and letters of reference to: J.M.S. Henis, Sr. Fellow, Mail Zone - U2E; MONSANTO COMPANY; 500 North Lindbergh Blvd.; St. Louis, MO 63167. Monsanto Company is an Equal Opportunity Employer M/F/H/V.

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THE JACKSON LABORATORY
Bar Harbor, ME USA 04609

THE JACKSON LABORATORY is an independent research institution having a major emphasis on mammalian genetics, developmental biology, immunology, and cancer. Most investigators utilize murine model systems. The Laboratory is undertaking an expansion of its research staff at all levels. Excellent candidates in all areas of research appropriate for The Jackson Laboratory are sought, including those candidates whose programs focus on the study of the whole organism as an integrated system, and in the areas of mammalian genetics, developmental biology, immunogenetics, endocrinology, reproductive biology, hematology, neurobiology, or cancer. Applicants should send curriculum vitae, description of research interests, and the names of three professional references to:

The Jackson Laboratory
Bar Harbor, ME USA 04609

The Jackson Laboratory is an Affirmative Action/Equal Opportunity Employer

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UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

Under the auspices of the NSF EPSCoR II Program and the State of Arkansas, the University of Arkansas for Medical Sciences is expanding in the area of Neuroscience with the ultimate goal of forming a Neurobiology Research Center. Applications are requested for four tenure track positions at the Assistant Professor level. The successful candidates will be expected to develop strong independent research programs; to participate in multi-investigator collaborative efforts; and to teach medical/graduate students.

Applications should include a Ph.D. degree and at least two years of post-doctoral experience. Appointments will be made in either the Department of Anatomy or the Department of Physiology and Biophysics. The starting date for two of the positions will be no earlier than August, 1990, and for the other two positions no earlier than August, 1991. Salaries and recruiting packages are competitive. Ongoing extramurally-funded research includes work on brain and spinal control of locomotion, gait response to injury, neuron/glial tissue culture, spinal cord grafting techniques, effects of survival factors in development, sexual dimorphism in the spinal cord, regulation of the female response, control of neurohymophysical, and receptor regulation, especially adrenoreceptors. The four individuals to be appointed must have experience in one or more of the following areas: Spinal Cord Physiologist—intracellular recordings in vitro and in vivo, respiratory/vestibular/motor/locomotor control; Molecular Neurobiologist—regulation of gene expression, in vitro mutagenesis; Cellular Neurobiologist—in situ hybridization, mRNA expression, cytoimmunology; Developmental Neurobiologist—cell surface interactions, neuronal connectivity, ultrastructure, autoradiography, immunochemistry.

Candidates should send a curriculum vitae, a statement of their research interests and plans, and the names of three references to:

Prof. E. Garcia-Rill
Project Director and Chairman, Search Committee
Slot 510, University of Arkansas for Medical Sciences
4301 W. Markham Street
Little Rock, AR 72205

Deadline for receipt of applications for full consideration is June 15, 1990.

UAMS is an equal opportunity/affirmative action employer.
**MERCK**

We are a large corporation in the chemical-pharmaceutical industry, and are active in many countries all over the world. Our wide range of products is the result of our own research activities using state-of-the-art facilities. For new developments in our pharmaceutical research in Darmstadt, Germany, we are looking for a qualified

**Biomolecular Computing Scientist**

This position is available for a research scientist to use techniques of molecular modeling, molecular graphics and molecular dynamics in pharmaceutical research. The work will be directed primarily to immunological problems.

The position is an opportunity for an innovative scientist with the right combination of practical ability and interpersonal skills to join our multidisciplinary research.

The successful candidate should possess a Ph.D. in biochemistry or biophysics or a related field.

Qualified candidates for this position must have a unique background covering a variety of disciplines including a general knowledge of protein crystallography, protein design and protein data bases. Experience in biophysical chemistry is essential, experience in molecular modelling techniques related to macromolecules is desirable.

Please send your application to:

E. Merck
Personalabteilung AT
Postfach 4119
D – 6100 Darmstadt 1

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**National Institutes of Health**

**ENDOCRINOLOGIST**

The Biochemistry and Molecular Pathophysiology Section, Diabetes Branch, National Institute of Diabetes and Digestive and Kidney Diseases, seeks outstanding candidate with M.D. or Ph.D. with at least 3 years of postdoctoral research training and experience to participate in a research program on insulin receptors. Applicant should have research interest and preferably experience in applying methods of biochemistry, cell biology, and molecular biology to investigate the mechanism whereby the insulin receptor mediates the action of insulin upon cells. Applicants should be familiar as well with the methods of molecular genetics as applied to elucidating the causes of genetic disease, and should have a substantial record of publication of original work. Starting salary $42,000 or may be negotiable commensurate with qualifications and experience. Interested candidates should submit curriculum vitae, several reprints, summary of research interests, and names of three references to:

Simeon I. Taylor, M.D., Ph.D.
National Institutes of Health
Building 10, Room B4-243
9000 Rockville Pike
Bethesda, Maryland 20892

NIH is an Equal Opportunity Employer

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**Scientist, Cellular Pathology**

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has a challenging opportunity for an established scientist to join the Cellular Pathology Unit in the Department of Experimental Pathology.

We are seeking a Senior Scientist to conduct research in the pathogenesis of drug-induced toxicities and animal models of disease and to supervise GLP toxicity studies to support our drug development activities.

The successful candidate will have:

- An advanced degree in Experimental Pathology or a related field.
- 5 or more years broad experience in biomedical research.
- Experience in toxicology, experimental pathology or veterinary medicine.
- Experience in the cell biology and molecular genetics of animal models of cardiovascular disease would be an asset.
- Excellent oral and written communication skills.
- Experience in leading a laboratory.

Located in suburban Philadelphia, SmithKline Beecham Pharmaceuticals offers a collegial work environment with considerable opportunity for personal and professional growth. For confidential consideration, please forward your curriculum vitae to: Liz McKendry, E135, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.
POSTDOCTORAL RESEARCH POSITIONS

Cetus Corporation, a leader in biotechnology, currently has two Postdoctoral Research positions available.

One position is available in the Department of Protein Chemistry. Responsibilities include purification and characterization of native and recombinant proteins, as well as structure/function studies in collaboration with a multi-disciplinary team. Requirements include a PhD with significant experience in protein fractionation and detection at the micro level. Facility with HPLC or FPLC and western analysis is expected. Knowledge of immunology and cellular or molecular biology is desirable. Box 90067/KK.

A second position is available in the laboratory of Dr. L.L. Houston. This position is funded by a grant from the National Cooperative Drug Discovery Group (NCI) to investigate and characterize novel immunotoxins made with single chain Fv (SFV) antibodies made in E. coli. Biosynthetic antibody binding sites will be linked chemically and genetically to recombinant ricin A chain and other toxins. A PhD and experience in protein chemistry and immunology are required. Box 90082/LH.

Interested candidates should send their CV and the names of three references, noting appropriate Box, to: Cetus Corporation, Human Resources, 1400 53rd Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.

WE'RE CHANGING MILLIONS OF LIVES. NOW IT'S YOUR TURN.

At Praxis Biologics, a wholly owned subsidiary of American Cyanamid Company, we're pioneering the design, manufacture and marketing of vaccines so sophisticated, they're changing people's lives—right now.

At Praxis, you'll help improve the quality of a lot of lives. Including your own. Our Rochester, NY research facility is located within easy reach of some of New York State's most attractive cultural, educational and recreational resources.

RESEARCH SCIENTIST — Virology Group
We are seeking a Ph.D. with a minimum of 2 years' postdoctoral experience who is skilled in the fields of virology, biochemistry, immunology and pathogenesis. You will define mechanisms and develop potential vaccines targeted for control of upper respiratory diseases. Supervision of support staff will also be required.

RESEARCH SCIENTIST — Protein Chemistry
You will develop and perform analytical methods for the identification, characterization and quantification of a variety of protein and glycoconjugate vaccines. To qualify, you must have a Ph.D. or M.S. in Biochemistry or an equivalent field and 2 or more years' experience in the purification, characterization and sequencing of proteins and in instrument automation. Supervision of support staff will also be required.

At Praxis, you'll enjoy a professional atmosphere and the kind of salary and benefits package you'd expect from an industry leader. Please send your resume to: Human Resources Department, 300 East River Rd., Rochester, NY 14625. An Equal Opportunity Employer MF.

Bio-Organic Chemist Team Leader

Enzymatics, Inc. has pioneered the application of biochemical Analog to Digital technology. The results are highly accurate, disposable, independent tests that are essentially chemical computers.

We are looking for a senior Ph. D. to lead and staff a technology expansion team. The team leader will work in collaboration with leading academic scientists in an unusually broad effort involving organic chemistry, DNA cloning, and receptor substrate interactions.

We are also recruiting Industrial Postdocs to join this team. Research publication will be encouraged.

Please send your resume with salary history to:

Enzymatics, Inc.
355 Business Center Drive
Horsham, PA 19044
An Equal Opportunity Employer

Progenics Pharmaceuticals, Inc.

INVESTIGATOR AND POSTDOCTORAL POSITIONS

The Department of Molecular Immunology and Virology is recruiting scientists for Investigator and Postdoctoral positions. Applications are invited from scientists of the highest caliber with Ph.D., M.D., or M.D./Ph.D. degrees. Progenics provides a strong interactive environment for collaborative research among basic science and clinical investigators. Current research interests of the staff include:

Paul J. Maddon, M.D., Ph.D.
Gary A. Beaudy, Ph.D.

Molecular biology and biochemistry of HIV and CD4 (the HIV receptor); molecular mechanisms of virus-receptor interaction and viral infection; development of viral inhibitors; molecular mechanisms of T cell function. (Cell 42, 93-104; 47, 333-348; 54, 865-874; 57, 469-481; Nature 331, 82-84; PNAS 84, 9155-9159)

Candidates should send a curriculum vitae, a description of their research experience, and the names and addresses of three references to:

Director, Human Resources
Progenics Pharmaceuticals, Inc.
Old Saw Mill River Road
Tarrytown, NY 10591
POSTDOCTORAL POSITIONS

National Institute of Diabetes and Digestive and Kidney Diseases
Phoenix, Arizona

Full-time research position is now available for an M.D. or Ph.D. at the Clinical Diabetes and Nutrition Section to participate in studies of energy metabolism in humans. Expertise in human physiology and energy metabolism is required. Two-year postdoctoral experience in this field is preferred.

The position involves supervising technicians and less experienced fellows in ongoing studies of energy expenditure (indirect calorimetry and isotope ratio mass spectrometry) and participating in the establishment of new lines of research.

Send curriculum vitae, three references, and a summary of current research activity to:

Eric Ravussin
Clinical Diabetes and Nutrition Section
National Institutes of Health
4212 North 16th Street
Room 541
Phoenix, Arizona 85016.

NIDDK is an Equal Opportunity Employer

Boehringer Ingelheim Pharmaceuticals, Inc. is engaged in the discovery, development, manufacture and marketing of novel drug compounds. The following position is currently available in the Department of Toxicology and Safety at our Research and Development Center, located in Danbury, CT.

SENIOR TOXICOLOGIST

Responsibilities include: being Study Director for in-house pre-clinical toxicology studies, writing protocols and reports, monitoring toxicology studies performed at contract laboratories, participating in the evaluation of new pharmaceutical candidates and supervising a technical staff.

Requirements include a Ph.D. in Toxicology, Pharmacology or related discipline with two or more years post-doctoral experience as a Study Director for toxicology studies in support of new chemical/ pharmaceutical agents.

Boehringer Ingelheim offers a competitive salary and benefits package including relocation assistance, modern facilities and the opportunity to have your contributions recognized.

If interested, please send your curriculum vitae to:
Dept JC-13-027, Boehringer Ingelheim Pharmaceuticals, Inc., 90 East Ridge, PO. Box 368, Ridgefield, CT 06877. We are an equal opportunity employer M/F/H/V.

R&D -
Clinical Chemistry/Biochemistry (PhD, MS levels);
Statistics (MS):

Our R&D people, like our reagents, represent an excellent "mix."

Ciba Corning is a worldwide diagnostics company – a leader in meeting the specific needs of STAT and routine laboratory testing, with a reputation for product innovation.

When you join Ciba Corning, you'll be joining an international company with over 2100 employees and interesting, challenging projects. Yet when you join our R&D group in Oberlin, a beautiful college town just west of Cleveland, you'll be part of a unit that recognizes individual talent and achievement... encouraged by supportive management. Growth creates opportunities:

• Sr. Immunologist
• Sr. Scientist – Reagent Chemistry
• Sr. Scientist – Experimental
• Sr. Scientist – Immunochemistry

Minimal requirements: PhD or MS with extensive experience in some of the following: immunoassays, immunology, clinical chemistry assays/instrumentation, turbidimetric reagents development/applications.

• Statistician

Minimal requirements: MS in Statistics, with experience in clinical science and engineering reliability.

If this sounds like your environment for success, send your resume and recent salary history to:

CIBA-CORNING
132 Artino Street • Oberlin, OH 44074
An EEO/AAffirmative Action Employer M/F/H/V
No phone calls or third party inquiries, please.
POSTDOCTORAL POSITION. Available immediately to study developmental regulation of mammalian intestinal lipoprotein metabolism. Strong background in molecular biology and experience in in vitro and in vivo models of lipid metabolism required. Send curriculum vitae and names of three references to: Dr. J. M. Baetge, Department of Biological Chemistry, University of Washington, Seattle, WA 98195.

POSTDOCTORAL POSITION. Biogenic chemical: one to two available immediately for research on oxidosqualene cyclase (a viral enzyme that converts squalene to isoprenoids) and its effects on viral growth. Send curriculum vitae and names of three references to: Dr. J. W. Wood, Department of Biological Chemistry, University of Wisconsin, Madison, WI 53706.

POSTDOCTORAL POSITION. Available immediately for studies on the molecular basis of mammalian protein synthesis. Send curriculum vitae and three references to: Dr. T. A. Ditz, Department of Medical Biochemistry, University of California, Los Angeles, CA 90024.

POSTDOCTORAL POSITION. Available immediately for studies on the regulation of mammalian cell proliferation and transformation. Send curriculum vitae and three references to: Dr. R. B. K. V. Levitt, Department of Biochemistry, University of California, San Diego, CA 92199.

POSTDOCTORAL POSITION. Available immediately for studies on the molecular basis of mammalian protein synthesis. Send curriculum vitae and three references to: Dr. T. A. Ditz, Department of Medical Biochemistry, University of California, Los Angeles, CA 90024.

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RESEARCH SCIENTIST
MOLECULAR BIOLOGY

Amgen, an innovative leader in the discovery, development, and marketing of human therapeutics through applied biotechnology, has an immediate opportunity for a Research Scientist in our Molecular Biology Group.

Responsibilities for this position will include the development of research programs leading to the identification and cloning of novel cellular growth factors involved in stem cell regeneration and recruitment.

Qualified applicants must have a Ph.D. in Molecular or Cellular Biology and a minimum of 2 years’ postdoctoral experience in the characterization of cellular growth factors, cDNA cloning, and the expression of recombinant proteins.

Amgen offers an excellent compensation and benefits package as well as a challenging research environment on the leading edge of biotechnology. If you have the necessary skills and qualifications and would like to be a part of an organization that places a high priority on its human resources, please send a complete CV, in confidence, to:

AMGEN, INC.
Recruitment, Dept. #527
Amgen Center
Thousand Oaks
CA 91320-1789

Equal Opportunity Employer

CAMBRIDGE INTERDISCIPLINARY
RESEARCH FOR PROTEIN ENGINEERING


The Cambridge Interdisciplinary Research Centre in Protein Engineering has been set up by the Medical Research Council in laboratories at the MRC Centre (Addenbrooke's Site) and Cambridge University Chemical Laboratory. The remit of the Centre covers all areas of Protein Engineering including macromolecular interactions. The Centre will act as a focus of collaboration between the University, the MRC Laboratories and Industry, under the Directorship of Professor Alan Fersht and Dr. Greg Winter.

There are some special positions available for Postdoctoral workers who wish to pursue independent research in the general area of Protein Engineering and Design. They will receive full support from the Centre, plus possibilities of additional funding, via the LINK initiative to form small research groups.

Salaries for Scientists in the range of £10,458-£20,469 pa. Salaries for Research Support Staff in the range of £6,668–£12,223 pa, possibility of performance pay up to £14,335 pa. Optional MRC Pension Scheme.

Please send full cv’s, names of three referees and, in case of applicants for the independent scientific positions, a resume of a research proposal, to: Professor A R Fersht, FRS, Director, Cambridge Centre for Protein Engineering, University Chemical Laboratory, University of Cambridge, Lensfield Road, Cambridge CB2 1EW.

The Medical Research Council is an Equal Opportunity Employer.
**Postdoctoral Opportunity Bioremediation Project**

Lawrence Livermore National Laboratory, one of the nation’s premier research and development organizations, has a challenging postdoctoral opportunity with our Geochemistry group in the Earth Sciences Department.

The successful applicant will participate in a newly initiated multidisciplinary research effort to develop innovative strategies for in situ microbial subsurface hazardous waste remediation. This project will initially be directed toward experimental and theoretical studies of microbial degradation of chlorinated organic solvents, chemical and physical interactions between the biological and inorganic portions of the system, and modeling of the fluid-flow and chemical transport. You will participate in an effort to describe quantitatively the chemical changes in the aqueous phase and rock matrix concomitant with the growth of a microbial community in a groundwaterrock medium. Close collaboration with LLNL scientists engaged in related experimental and theoretical work will be required.

Requirements include a PhD in Organic Chemistry, Biochemical Engineering, Organic Geochemistry, or equivalent. A background in biochemistry and biochemical engineering is desirable; familiarity with the thermodynamics of aqueous solutions and the computational aspects of heterogeneous chemical equilibria would be very helpful. Experience with microbial water treatment processes a plus, but not required.

LLNL offers an excellent salary and compensation package, as well as the opportunity to work in a state-of-the-art facility. For immediate consideration, please forward your resume to: Phil Harding, Professional Staffing, Lawrence Livermore National Laboratory, P.O. Box 5510, L-725, Dept. A90262, Livermore, CA 94550. U.S. citizenship required. Equal Opportunity Employer.
PHYSICAL SCIENTIST
GS-1301-14

The National Institutes of Health (NIH), National Center for Research Resources, Biomedical Engineering and Instrumentation Program, has a career civil service position for a Physical Scientist at GS-14 ranging from $50,342 - $65,444/annum, depending upon qualifications.

The position is Manager of the NIH In Vivo Nuclear Magnetic Resonance Research Center, administered by the Biomedical Engineering and Instrumentation Program.

The In Vivo NMR Research Center is a centralized resource unique at NIH, providing facilities and technical support for NIH scientists seeking to advance in vivo NMR technology, its application to animal and human physiology, and ultimately its clinical application.

The incumbent will: develop and coordinate research programs to advance in vivo NMR technology; provide consultations to researchers in localized spectroscopy, functional imaging, flow imaging, diffusion imaging, sodium imaging; allocate resources; insure smooth functioning of equipment and facilities, etc.

Qualifications:

Candidates must hold a doctoral degree plus have one (1) year of specialized experience that is equivalent in difficulty to the next lower grade level in the Federal Service. Specialized experience is in applying in vivo NMR instrumentation and techniques to imaging and spectroscopy. Experience in providing direction for or managing an in vivo NMR imaging and spectroscopy research facility.

An application for consideration must be received on or before May 25, 1990.

Candidates should submit an Application for Federal Employment (SF-171), curriculum vitae, bibliography, and at least three (3) references to:

Ms. Rosemary Carter
National Institutes of Health
Public Health Service
Building 12A, Room 4057
9000 Rockville Pike
Bethesda, Maryland 20892

U.S. Citizenship Required
NIH is an Equal Opportunity Employer

FACULTY POSITION IN NUCLEAR CHEMICAL ENGINEERING

The Department of Nuclear Engineering at MIT is seeking qualified applicants for a tenure track position at the level of assistant professor in the area of Nuclear Chemical Engineering. Candidates should hold a Ph.D. or Sc.D. degree in an engineering or physical sciences discipline.

The applicant should be strongly committed to research in nuclear energy conversion and have broad interests in nuclear chemical engineering, materials science and engineering, and environmental degradation of materials in nuclear applications. Candidates who combine strengths in basic science and engineering applications will receive preference. Candidates should have experience in one or more of the following areas: chemical processing of radioactive materials and materials used in fission reactor fuel cycles, nuclear waste management systems, irradiation effects on nuclear materials, and corrosion and water chemistry in LWRs. The ability to carry on a successful experimental research program is highly desirable.

The position requires the capability to develop a substantial research program, either individually or through interaction and collaboration with other departmental faculty as well as with scientists and engineers at the MIT Nuclear Reactor Laboratory (NRL). The NRL is an on-campus, interdepartmental, interdisciplinary laboratory which operates a 5MW research reactor and associated facilities. The NRL serves as a focal point for several large projects in nuclear materials and nuclear chemical engineering, in which the applicant is encouraged to join and eventually assume a leadership role.

The candidate should be capable of teaching a variety of courses in the academic areas of nuclear chemical engineering, nuclear waste management, nuclear materials, and corrosion engineering, as well as assisting in the development of new fission engineering courses. The successful candidate will have the responsibility for the supervision of student research at the undergraduate, master’s and doctoral levels.

Interested candidates should send their resumes to:

Dr. Neil E. Todreas,
Search Committee Chairman
Nuclear Engineering Department, 24-219
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, MA 02139.

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POSTDOCTORAL POSITIONS

We have discovery down to a science.

Hoffmann-La Roche is one of the world’s foremost companies involved in pharmaceutical and medical research. We have a variety of research opportunities in our Exploratory Research organization, located at our Nutley, New Jersey headquarters.

MOLECULAR IMMUNOLOGIST

You will join an interdisciplinary team investigating the molecular basis of rheumatoid arthritis, and assume responsibility for cloning and characterizing T cells, and developing new in vitro models of arthritis. A PhD in Molecular Biology, Immunology or a related field with experience in molecular and cell biology techniques required. Please refer to Position PK on c.v.

MOLECULAR BIOLOGIST

You will use expression cloning techniques to identify genes encoding novel cell surface molecules involved in leukocyte endothelial adhesion. A PhD in a Biological Science with experience in cell culture techniques and/or mammalian expression cloning systems desirable. Please refer to Position DP on c.v.

MOLECULAR MODELING

Develop and implement new methods for the design of molecules as potential drug candidates. A PhD in Chemistry is required; a background in molecular modeling techniques and computer programming experience desirable. Please refer to Position CC on c.v.

MOLECULAR BIOLOGIST

Develop a novel genetic system for the cloning and characterization of proteins that interact with c-myc and other nuclear protooncogenes. A PhD in Molecular Biology, Genetics or Biochemistry with experience in rDNA required; a background with yeast genetics is desirable. Please refer to Position GJ on c.v.

ORGANIC BIOCHEMIST

You will participate with a multidisciplinary team whose research is directed towards the design and synthesis of modified peptides and small molecules to increase their transport across cell membranes. You must be a PhD Chemist with skills in synthesis and analytical techniques of gel filtration, ion exchange chromatography and reverse phase HPLC. Please refer to Position PR on c.v.

MOLECULAR BIOLOGIST

You will study virus gene products at the molecular level with a view towards defining targets for antiviral agents and designing hybrid viruses that may be used in animal models of viral disease. A PhD in Molecular Biology with a background in virology required. Please refer to Position IS on c.v.

Hoffmann-La Roche offers the benefits of a multidisciplinary environment that stimulates personal and professional growth, and encourages publications. In addition, we are conveniently located in an attractive suburban community just west of New York City and its cultural and intellectual energy. Our salaries and benefits package are competitive.

For consideration, please send your curriculum vitae and the names of three references, indicating the code for your position of interest, to: Mr. R.H. Stevenson, Assistant Director, Exploratory Research, Hoffmann-La Roche Inc., Nutley New Jersey 07110. We are an equal opportunity employer.

POSTDOCTORAL POSITION

Immediately available for 2 to 3 years, starting no later than 1 July 1990. Research will involve cloning and expression of tumor-associated antigens. Ph.D. with experience in recombinant DNA technology and cDNA expression systems strongly preferred. Interested candidates should send a letter describing research interests, curriculum vitae, and names of three references to: Dr. Donald L. Morton/Dr. Robert Chia, Division of Surgical Oncology, University of California, Los Angeles (UCLA), School of Medicine, 9-267 Factor Building, Los Angeles, CA 90024-1782. UCLA is an Equal Opportunity/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available 1 July 1990 to study the effects of cytokines and bacterial-derived protein toxins on vascular endothelial cells in vitro. A focus is placed on transcriptional/translational regulation of endothelial hemostatic factors. Prior experience in vascular biology is desirable. Please send curriculum vitae, a statement of research interests, and names of three references to Dr. Tom G. Obeig, University of Rochester Medical Center, Department of Microbiology and Immunology, Box 672, 601 Elmwood Avenue, Rochester, NY 14642. The University of Rochester is an Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL Position to study DNA repair in chromatin of mammalian and yeast cells. Specific areas include: repair in yeast minichromosomes (Coll, 18 May 1990 issue). UV photolysis in chromatin (Ch. Mol. Biol. 204, 949 (1988)). repair in inductive genes, and isolation and EM visualization of biotin-tagged repair complexes. Send statement of interest, resume, and three names of references to: Dr. Michael J. Smerdon, Biochemistry/Biophysics Program, Washington State University (WSU), Pullman, WA 99164-4500. FAX: 509-335-9550, WSU is an Equal Opportunity/Affirmative Action Employer. Protected group members are encouraged to apply.

POSTDOCTORAL POSITIONS. Available in Departments of Biochemistry, Molecular and Cellular Biology, Microbiology and Immunology, Pharmacology, and Physiology. Applicants must have a Ph.D. or M.D. degree. Positions available during 1990 and 1991. Closing date: 31 December 1990 or until positions are filled. Women and minorities are urged to apply. Send applications to appropriate department head: The University of Arizona, Arizona Health Sciences Center, Tucson, AZ 85724.

An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

POSTDOCTORAL FELLOW

To measure whole cell and single channel K+ and Ca2+ currents in isolated smooth muscle cell. Curr; measure intracellular Ca2+ and pH with fluorescent probes, and to examine the cellular and ionic mechanisms of vasodepressive fatty acids. The successful candidate will be part of an interactive program studying chemical and mechanical transduction mechanisms controlling vascular tone, and be an active participant in a hypertension program project grant. The position is available 1 July 1990. Send curriculum vitae and three references to: Dr. David R. Harden, Department of Physiology, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226. Equal Opportunity/Affirmative Action Employer, M/F/H.

POSTDOCTORAL FELLOWSHIPS IN COGNITIVE NEUROSCIENCE

The McDonnell-Pew Center for Cognitive Neuroscience announces the availability of fellowships to support interdisciplinary postdoctoral trainees. For 1990-91, these fellowships will be concentrated on bridging computational neuroscience and cognitive psychology, in examining event-related potentials and magnetoencephalography, and in the neural bases of language and memory, within ongoing research programs at the University of California, San Diego; The Salt Institute; and the Research Institute of Scripps Clinic. Send a statement of research interests, curriculum vitae, and letters of recommendation from three academic references to: Dr. Terrence Sejnowski, The Salt Institute, 10010 North Torrey Pines Road, La Jolla, CA 92037. Equal Opportunity/ Affirmative Action Employer.

SCIENCE, VOL. 248
POSTDOCTORAL FELLOW. Two- to four-year position available 1 July 1990 to study plasminogen/plasminogen activator regulation by endothelial cells. M.D. and/or Ph.D. required with experience in molecular genetics. Send curriculum vitae and letters of reference to: Dr. Katherine A. Hajjar, Departments of Medicine/Pediatrics, Cornell University Medical College, 1300 York Avenue, New York, NY 10021 Cornell University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP. Immediate opening to participate in studies of cytochrome P450 gene regulation and protein function. Areas of interest include, (i) molecular mechanisms of cytochrome P450 gene induction by chemical carcinogens, (ii) the tissue-specific control of P450 genes, and (iii) the function of P450s in cells following transfection of recombinant cDNA and gene clones. Requirements include a Ph.D. with a solid background in molecular or cell biology. Send curriculum vitae and names of references to: Dr. Robert Tukey, University of California, San Diego, Cancer Center, T-012, La Jolla, CA 92037.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for minimum of 1 year to study mammalian mitochondrial biogenesis and the role of DNA topoisomerases in this process. Project involves enzymologic and molecular biologic approaches so experience in recombinant DNA and/or protein biochemistry is desirable. Send curriculum vitae and names of three references to:

Dr. Frank J. Castora
Department of Biochemistry
Eastern Virginia Medical School
700 Olney Road
Norfolk, VA 23501

Affirmative Action/Equal Opportunity Employer.

PROTEIN BIOCHEMIST. Proficient in purification and characterization of connective tissue proteins using gel electrophoresis, gel exclusion and affinity chromatography, isoelectric focusing, hydroxyapatite chromatography, HPLC, electrophoresis, blot transfer, tissue culture. Knowledge of producing and characterizing monoclonal and polyclonal antibodies.

Requirements include a doctorate in biochemistry or biology and at least 2 years of practical experience. Forty hours per week; salary negotiable. Position located at University of California, Los Angeles.

Send resume on or before: Nancy Jordan-Smith, 1000 Veteran Avenue, Room A3-34, Los Angeles, CA 90024.

PROTEIN STRUCTURE ANALYSIS CHEMIST

Houston Biotechnology Incorporated is a privately held company founded in 1984 specializing in the research and development of biopharmaceutical products, specifically those for the prevention and/or treatment of eye and brain disorders. We are currently expanding our division of product development and seek a physical chemist with experience in the area of characterization and analysis of proteins. The ideal research would have a familiarity with circular dichroism, mass spectroscopy, NMR, HPLC, capillary electrophoresis, glycoprotein chemistry, heterogeneous chemistry, in addition to standard chromatographic, electrophoretic, and immunological methods of protein analysis. Experience with monoclonal antibody characterization and biochemical regulatory requirements is desirable. This position will be part of a biochemical team which solves complex biochemical problems. Candidates should possess a Ph.D. or equivalent with 2 to 3 years of relevant experience, and excellent written and oral communication skills.

Houston Biotechnology Incorporated is located next to the Baylor College of Medicine's Center for Biotechnology in the Research Forest of The Woodlands, a planned residential-commercial community 35 miles north of Houston with very affordable housing and beautiful parks within minutes of us. Qualified applicants should forward a resume and description of relevant experience in protein structure analysis to: Candy Owens, Director of Human Resources, Houston Biotechnology Incorporated, 3608 Research Forest Drive, The Woodlands, TX 77381.

POSTIONS OPEN

Schering

Assistant and Associate Scientists

If advancing new discoveries in cardiovascular drugs is what you have in mind, come to Schering-Plough Research.

Schering-Plough, a $3-billion, research-driven healthcare corporation, has exciting challenges at the forefront of cardiovascular pharmacetics. The following positions are currently available at our Bloomfield, New Jersey facility:

**Associate Scientist (Pharmacology)**

Requires an MS or BS in Biology and experience in small animal handling and surgical techniques. Knowledge of cardiovascular physiology or pharmacology, or a background in antihypertensive drug discovery would be ideal.

**Assistant Scientist (Molecular Biology)**

Requires a BS/MS in Biochemistry or Biological Sciences with 1-3 years' laboratory experience in Molecular Biology. Experience with cDNA library construction and screening, sequencing, DNA/RNA isolation and analysis, blotting techniques, tissue culture, PCR, and radioactive labeling is preferred.

**Assistant Scientist (Biochemical Pharmacology)**

To execute research in cardiovascular pharmacology leading to the discovery of novel therapeutic agents. Requires a BS in Biochemistry with 0-3 years' laboratory background, or an MS in Biochemical Pharmacology. Prefer experience in concepts and methods of receptor theory and radio-labeled ligand binding assays, regulation of enzyme function, and/or purification and characterization of proteins (SDS gel electrophoresis and column chromatography).

As members of a team investigating drug discovery in the cardiovascular field, you must be self-motivated and goal-oriented with the ability to work independently and interact effectively with all staff.

We offer a very competitive salary and benefits package. For prompt consideration, please send resume, indicating position of interest, to: Ms. P. Valendo, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. An equal opportunity employer.

What you have in mind, we put in action.
Incredible! It turns out the four unifying forces in the universe are air, earth, fire, and water!
**Postdoctoral Research Associates**

The Agricultural Research Service as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency’s work is carried out under six specific research objectives—conservation of national resources, crop production and protection, animal production and protection, human nutrition, postharvest research, and integration of management systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

ARS is currently recruiting for 100 postdoctoral positions throughout the country. Opportunities exist in many research areas, including:

- Human Nutrition
- Genetics
- Immunology
- Virology
- Biochemistry
- Chemistry
- Microbiology
- Animal Science
- Entomology
- Plant Physiology
- Plant Pathology
- Agronomy
- Soil Science
- Engineering

Successful candidates will be hired initially for up to 2 years in duration. Salary for these GS-11/12 positions ($29,891 to $35,825) will be based on qualifications and experience.

For written descriptions of positions and application procedures, write to:

N. L. Bakes
Personnel Division (S)
USDA/ARS
6305 Ivy Lane, Room 137
Greenbelt, MD 20770

or call:

Ms. Kim Conley
(301) 344-2796

ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

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**Cardiovascular Research**

**Postdoctoral Scientist**

CIBA-GEIGY Pharmaceuticals Division, headquartered on 100 acres in Summit, New Jersey, is respected worldwide for cardiovascular research and the development of products to treat cardiovascular disorders.

We are seeking a Postdoctoral Scientist to join our multi-disciplinary team studying the molecular and cellular pathology of myocardial ischemic-reperfusion injury. Candidates must possess a PhD in Biochemistry, Cell Biology, Pharmacology or Molecular Biology. Extensive experience with the analysis of receptor-effector systems and intermediary metabolism, mammalian tissue culture, tissue fractionation and enzymology, as well as various chromatographic and electrophoresis techniques, is highly desirable. As a Postdoctoral Scientist, participation in scientific forums and publication of research findings is expected.

We offer competitive salaries and comprehensive benefits in an environment conducive to personal and professional growth. Please send your resume with salary requirements to: Staffing Center, CIBA-GEIGY Corporation, Pharmaceuticals Division, Dept DJ, 556 Morris Avenue, Summit, New Jersey 07901. We Are An Equal Opportunity Employer M/F/H/V.
POSTDOCTORAL POSITION


Those with prior experience in nucleic acid enzymology are particularly urged to apply.

Please send letter and curriculum vitae, or call (405) 271-7610.

Joan W. Conaway, Ph.D.
Ronald C. Conaway, Ph.D.
Program in Molecular and Cell Biology
Oklahoma Medical Research Foundation
825 N.E. 15th Street
Oklahoma City, OK 73104

EOE/Affirmative Action Employer. OMRF encourages women and minorities to apply.

SIGMA XI, WORKSHOP

Undergraduate Entry-Level Courses in Science, Mathematics and Engineering

Wingspread Conference Center
Racine, Wisconsin
21-24 June 1990

A multi-disciplinary approach to entry-level courses for majors and entry-level courses for general education, based upon the premise that issues common to undergraduate entry-level courses, regardless of discipline, are effective leverage points in enhancing student interest and facilitating student pursuit of education in science, mathematics and engineering.

Help us identify 45 participants from diverse disciplines and types of institutions, and with diverse experience and commitment. In particular, please help us identify the frequently under-represented: the young (less than 10 years beyond the doctorate), women, minorities, social scientists, and 2-year college faculty.

Nominate yourself or others by brief, substantive letter. Review of nominations will begin 25 May 1990. Travel, lodging and meals provided through a Johnson Foundation grant and pending NSF support.

Dr. Anna J. Harrison
Chair, Sigma Xi Committee on Science, Mathematics and Engineering Education
14 Ashfield Lane
South Hadley, MA 01075

ABBOTT LABORATORIES

Our Pharmaceutical Products Division is leading in the development and manufacture of anti-infective, cardiovascular and anti-convulant/neurological products. At nearly twice the industry standard, we have invested more than $500 million in R&D in 1989. We currently have opportunities for the following individuals:

CARDIOVASCULAR DRUG DISCOVERY GROUP

Assistant/Associate Scientists

The selected individuals will have a minimum of a Bachelor’s degree in a biological science, and at least 3 years of related experience. Experience in small animal surgery, handling plasma and urine samples, quantitative chemistry, radioisotopes and general laboratory instrumentation is desired. Preference will be given to candidates with relevant experience in cardiovascular/renal physiology or pharmacology. Job #TO-7550.

NEUROSCIENCE RESEARCH GROUP

Research Associates/Behavior

The qualified individual will have 2 or more years experience in Behavioral Pharmacology or a related area. Experience in small animal surgery, drug administration and computer-based behavioral test procedures are preferred. A B.S. or M.S. in a related discipline is required. Job #KA-7613.

Abbott offers an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area 30 miles north of Chicago. For consideration, please send your resume with salary history, indicating Job Number interested in, to: Patricia Handy, Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer.

ABBOTT LABORATORIES

Quality
Health Care
Worldwide
1888-1990
Research Scientists

Triton Biosciences Inc., an emerging pharmaceutical and diagnostics company, is focused on product development opportunities in the areas of cancer, AIDS and other serious diseases. We currently have the following positions available in our San Francisco Bay Area facility.

**cDNA Cloning**
Help establish a state-of-the-art cDNA cloning group for identifying and isolating human genes that may have diagnostic or therapeutic value in cancer treatment. You must have a PhD and 2+ years of post-doctoral research. Experience in successfully cloning novel cDNAs is essential. Industrial experience is desirable. Refer to job #90-021.

**Mammalian Expression Systems**
Help establish a state-of-the-art mammalian expression group for identifying and producing novel biologics that may have diagnostic or therapeutic value in cancer treatment. The successful candidate will have a PhD and 2+ years of expression work experience in mammalian tissue culture systems. Industrial experience is desirable. Refer to job #90-032.

**Cell Biology**
Develop novel cancer therapies involving onco-genes, growth factors, cytokines and monoclonal antibodies. Requires a PhD in Biology, Immunology or Pharmacology. Five or more years of experience in in-vitro and in-vivo tumor cell models is preferred. Refer to job #90-007.

**Cancer Markers**
Evaluate new cancer markers for diagnostic use, specifically for immunohistochemical applications. A PhD and a minimum of 3 years' experience in routine immunohistochemical techniques are required. Refer to job #89-063.

Triton offers competitive salaries and benefits, including a special incentive of $15,000-$30,000, and relocation assistance. For consideration, send your resume, along with a cover letter highlighting your skills and experience, to Triton Biosciences Inc., 1501 Harbor Bay Parkway, Alameda, CA 94501. EOE/AA employer.

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**REQUEST FOR APPLICATIONS**

The Molecular Basis of Cystic Fibrosis

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and the Cystic Fibrosis Foundation (CFF) invite investigator-initiated research applications to define and characterize the etiology and pathogenesis of cystic fibrosis (CF).

The purpose of this request is to elucidate the underlying biochemical defect(s) relative to the CF gene and the cystic fibrosis transmembrane regulator (CFTR) protein. Research areas include but are not limited to:

- Processes associated with the expression of CF gene products;
- Mechanisms involved in the abnormal ion transport in CF and the relationship to the structure and function of CFTR and other membrane proteins;
- Model systems to study the regulation of defective cellular processes;
- Potential therapeutic agents or strategies to reverse or modulate the underlying CF defect(s).

Research approaches must be directly relevant to CF. Applications must be submitted to the NIDDK. Proposals which are judged meritorious but are not funded by the NIH will be considered for support by the CFF.

NIH support will be provided as grants-in-aid determined by project scope. CFF support is available for up to three years.

The deadline for letters of intent is June 15 and for applications is August 1, 1990. Interested investigators are urged to contact Dr. Nancy Lamontagne, Director, Cystic Fibrosis Program (NIDDK) or Dr. Robert J. Beall, CFF Executive Vice President for Medical Affairs.

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Triton Biosciences Inc.
RESEARCH SCIENTISTS & ASSOCIATES

ImClone Systems Inc. is an innovative biotechnology company developing diagnostics, vaccines and therapeutics for the human healthcare market. Excellent positions are available for experienced individuals at all levels with backgrounds in the following areas:

MOLECULAR BIOLOGY — Protein expression, DNA Probes and Assays.

PROTEIN CHEMISTRY — chromatography experience, HPLC & FPLC.

IMMUNOLOGY/MONOCLONAL ANTIBODIES — tissue culture techniques, hybridoma fusion, ELISA and Western Blot.

MOLECULAR & CANCER IMMUNOLOGY

We offer a competitive salary and a wide range of benefits. Send curriculum vitae and salary requirements to: M. Satterlee, ImClone Systems Inc., 180 Varick Street, New York, NY 10014.

ImClone Systems Incorporated

Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITIONS. In neurobehavioral and neurocardiovascular pharmacology. Two positions ($20,000 per year) are available to begin before 31 October 1990. One position is a joint appointment with the Alzheimer’s Disease Research Center and involves studies of pharmacological approaches to enhance learning and memory performance in nonhuman primate and rodent models of Alzheimer’s disease and related diseases. The second position involves studies of central cholinergic and adrenergic systems in cardiovascular regulation and in models of hypertension. Send curriculum vitae and two letters of reference or contact: T. J. Bucsko, Department of Pharmacology and Toxicology, Medical University of Georgia, Augusta, GA 30912. Equal Opportunity/Affirmative Action Employer.

IMMEDIATE POSTDOCTORAL POSITIONS

IMMUNOLOGIST/CELL BIOLOGIST: Experience in monoclonal antibody technology and animals modeling autoimmune diseases. Candidates to work within multidisciplinary group examining the diagnostic and therapeutic potential of radiolabeled monoclonals. Salary based on experience. Must be available to begin no later than 1 November 1990. Send curriculum vitae to: A. I. Kass, Ph.D., Harvard Medical School, 50 Binney Street, Boston, MA 02115. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW IN MOLECULAR BIOLOGY. Position available to study the biochemistry and cell biology of the Alzheimer’s amyloid protein. Projects include: (i) purification of the amyloid precursor and its characterization with emphasis on posttranslational modifications; (ii) isolation of proteolytic enzymes involved in the secretion of the precursor from neuronal cells, and (iii) investigation of the biological properties of the purified precursor in cell culture. Candidates should have a background in biochemistry and experience in protein purification and cell culture technique. Salary is highly competitive and is commensurate with experience. Please send curriculum vitae and references to: Dr. Nikos K. Robakis, Ph.D., The Mount Sinai Medical Center, Department of Psychiatry, and Fishberg Neurology Center, Box 1229, New York, NY 10029. An Equal Opportunity/Affirmative Action Employer.

RESEARCH CHEMIST. To design and conduct basic research in protein chemistry by developing new chemical methods for detecting and analyzing nuclear acids, specifically as it relates to plant DNA; develop new methodologies for preparing and detecting of nuclear acids and synthesis of oligonucleotides; supervise small staff to develop and improve analytical techniques; and carry out polymer characterization. Salaries will be commensurate with experience in the field. Please submit application, resume and three references to: Dr. Scott Levy, Department of Pharmaceutical Sciences, University of Texas, Southwestern Medical School, 5323 Harry Hines Blvd., Dallas, TX 75235. An Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST. Ph.D. experienced in cell biology, molecular biology, and/or protein chemistry wanted for the Division of Pulmonary and Critical Care, Department of Internal Medicine at Yale-New Haven Hospital. Must be willing to participate in sectional programs and have the desire and ability to establish an independent line of investigation. Interest in inflammation, cytokines, and/or matrix is highly desirable. Tenure-track appointment with protected time and resources available for qualified individual. Please send curriculum vitae and three references to: Elizabeth Malinowski, Assistant Administrator, Yale University, Pulmonary and Critical Care Section, Department of Internal Medicine, 105 LCI Building, P.O. Box 3333, New Haven, CT 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTISTS/ASSOCIATES. Needed to join active laboratory investigating molecular biology of insulin and insulin receptors in prokaryotes, yeast, and fungi. Please send curriculum vitae and names of two references to: Dr. John J. Marx, Department of Physiology and Biophysics, University of Medicine and Dentistry of New Jersey (UMDNJ), Robert Wood Johnson Medical School, 60 Flemington Road, Piscataway, NJ 08854–5635. The UMDNJ is an Affirmative Action/Equal Opportunity Employer. F/M/H/V.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

POSTDOCTORAL RESEARCH ASSOCIATE. Livestock and Poultry Sciences Institute, Beltsville, Maryland, seeks an individual to characterize receptors on bovine leukocytes, in an effort to prevent bacterial infection of the udder. Candidates should have experience in applying molecular biology methods and techniques to this objective. Immunology experience desirable but not essential. Salary: $29,691 per annum; appointment is for 2 years. For information on the research assignment, contact: Dr. R. H. Miller, 301–344–2380. For information on application procedures/forms, contact: Sandra Thomas, 301–344–3953. Applications for this position must be marked OBE05.

USDA/ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

BIOMEDICAL ENGINEER

An opening exists in the Metabolic Diseases Branch, National Institutes of Health (NIH), for a person with M.S. or Ph.D., programming experience in UNIX, and experience in several of the following areas: computer image analysis, C-language, electrical engineering, light, fluorescence, and video microscopy. The incumbent will develop, maintain, and participate in cell biology research with a sophisticated video light microscopy system. The type of appointment will depend upon background. Send CV, summary of research interests, and names of at least 3 references to: Dr. Stephen Marx National Institutes of Health Bldg. 10, Room 9C-101 9000 Rockville Pike Bethesda, MD 20892 U.S. Citizenship is not required. NIH is an Equal Opportunity Employer.

RESEARCH ENGINEER

Please send curriculum vitae and names of two references to: Peggy O. Levy, Department of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401. For further information concerning the project, please contact: Dr. Barry Cooper, Department of Pathology, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401. For further information concerning the project, please contact: Dr. Barry Cooper, telephone: 607–253–3350; FAX: 607–253–3708. Cornell University is an Affirmative Action/Equal Opportunity Employer/Educator.

CORNELL UNIVERSITY
COLLEGE OF VETERINARY MEDICINE
DEPARTMENT OF PATHOLOGY
RESEARCH ASSOCIATE

CELL BIOLOGY/ELECTRON MICROSCOPY

A postdoctoral position for a research associate is available in the Neuromuscular Diseases Laboratory, Department of Pathology, New York State College of Veterinary Medicine, to study the cellular pathogenesis of muscular dystrophy. Experience in electron microscopy, particularly freeze fracture and etching techniques, is of particular interest. Please send curriculum vitae and a statement outlining your interest. Salary is commensurate with experience. Applicants are encouraged to apply. Further information may be obtained by contacting Dr. John H. McGrew, Department of Pathology, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853. Application deadline is August 1, 1990. Send curriculum vitae and names of two references to: Dr. John H. McGrew, Department of Pathology, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401. Cornell University is an Affirmative Action/Equal Opportunity/Education Employer.
An endangered hawksbill turtle glides above plates of staghorn coral. A shoal of moorish idols passes beneath emperor angelfish in search of small crustaceans, algae and polyps. Large tubular sponges act as natural filters. By drawing on each other's strengths and abilities, the inhabitants of Australia's Great Barrier Reef maintain the balance necessary to sustain their ecosystem.

Today, this same philosophy is bringing five Johnson & Johnson companies together to form a dynamic new research and development organization—the R.W. Johnson Pharmaceutical Research Institute (PRI).

The reason behind this initiative is simple. For Johnson & Johnson to continue as the world's health care products leader, we must make a firm and focused investment in the areas of drug discovery and development. And we're doing this by pooling the minds and resources of Ortho Pharmaceutical Corporation R&D, Cilag International Research Center, McNeil Pharmaceutical R&D, Ortho Biotech R&D and Johnson & Johnson Biotechnology Center.

Together, we have the strength and mass to meet the challenges of today's competitive research environment. And by meeting these formidable challenges, we will establish PRI as one of the world's leading pharmaceutical R&D companies. To do this, we're continually seeking entry through senior level candidates to join us at one of our several sites in the following fields: pharmacy, biology, biochemistry, toxicology, immunology, chemistry, microbiology, biochemical engineering, pharmacology, pathology, statistics, nursing and medicine. Send your resume to: Selection Dept. SC-511, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602. An Equal Opportunity Employer M/F
Post-Doctoral Scientist

Cangene Corporation has developed a unique and powerful nucleic-acid amplification technology. We are seeking an exceptional individual to join our team of scientists in the application of this technology to in vitro diagnostic assays.

The successful candidate will have:
- A Ph.D. in molecular biology, nucleic acid biochemistry, or closely related discipline;
- Sound training in basic molecular biology, with laboratory experience in nucleic acids, especially the enzymology of replication and transcription;
- Proven analytical and communication skills, and be an energetic self-starter.

Cangene Corporation is located near Toronto, a major academic, corporate and cultural centre in Canada. The Company offers an excellent remuneration package and the opportunity to work in a challenging, creative, and goal oriented environment. Candidates are invited to submit, in strictest confidence, a curriculum vitae, a list of publications, and the names of two referees, quoting file #0119.A to: Dr. Robin R. Guttal, Cangene Corporation, 3403 American Drive, Mississauga, Ontario, Canada L4V 1T4.

MOLECULAR BIOLOGY Post-Doctoral Program

The Upjohn Company, a research-based pharmaceutical firm located in Kalamazoo, Michigan, is inviting applications for its Post-Doctoral program. Openings are available in the following research areas:

CANCER RESEARCH: Study of intracellular genomic localization exhibited by DNA reactive anticancer compounds with the goal of identifying biologically important alkylatior loci. Studies will involve the use of cell biology, molecular biology and fluorescence based histochemistry.

TRANSGENIC PROGRAM: Isolation and characterization of embryonic stem (ES) cells from different lines of mice and rats. Studies involve construction of vectors for homologous recombination, isolation of ES cells with a marker at a specific chromosomal site, development of transgenic mice by microinjection into the egg, and subsequent analysis by various techniques.

E. COLI GENE EXPRESSION & PROTEIN SECRETION: Use of E. coli to identify genes and to express and study proteins of pharmaceutical interest. Examination of the interactions between a secreted protein and host-factors required for its export.

Individuals with a recent Ph.D. degree, preferably with a background in molecular biology, biochemistry, microbiology, cell biology or genetic toxicology, are encouraged to forward their resume and a statement of research interests and experience in strict confidence to: FAX (616/329-5525) or mail to The Upjohn Company, Position # 5679-BA, Corporate Employment, Kalamazoo, MI 49001. We are an Equal Opportunity Employer.

Graduate Program in Molecular Biology and Genetics

Director: Carlo M. Croce, M.D.
Chairman, Graduate Studies: James H. Keen, Ph.D.

As part of intensive development in the fields of molecular biology, molecular genetics and structural biology, a new doctoral program has been established by faculty of the Fels Institute for Cancer Research and Molecular Biology and several other departments of Temple University. Areas of training include:

Molecular genetics of growth control, oncogene activation and cancer suppression (Dr. Renato Baserga, Bruno Calabretta, Carlo Croce, Danuta Kozbor, Edward Mercer, Veena Rao, Shyam Reddy, Tapan Som).

Genomic Structure and transcriptional and developmental regulation (Drs. Marilyn Darby, Tadao Goto, Kay Huebner).

Molecular and structural biology of receptors and signal transducers (Drs. Jeffrey Benovic, Thomas Frielle, Bradford Jameson, James Keen, Gerald Litwack, Woon Ki Paik, Dianne Soprano).


The program has numerous specialized facilities available including peptide and oligonucleotide synthesis, and sequencing facilities, cell sorting by flow cytometry, computer facilities equipped for molecular modeling and 3-D structure prediction, magnetic resonance, low angle laser light scattering, electron microscopy, and is developing laboratories in X-ray crystal structure analysis.

Students accepted into the program will be provided with a predoctoral support including waiver of tuition and a stipend of $12,000 per year. For interested and qualified students, a M.D./Ph.D. program is available.

For further information regarding September 1990 entrance, contact: Dr. James H. Keen, Molecular Biology and Genetics Program, Fels Institute for Cancer Research & Molecular Biology, Temple University School of Medicine, 3420 N. Broad Street, Philadelphia, PA 19140. (215) 221-4354. Temple University is an Equal Opportunity Employer/Affirmative Action Employer.

Journey Postdoctoral Fellowship in Basic Biomedical Research

St. Jude Children's Research Hospital

The Journey Fellowship in Basic Biomedical Research is offered annually by St. Jude Children's Research Hospital, a premier, nonsectarian, center for biomedical research and catastrophic diseases of children. The Journey Fellowship is open to junior Ph.D. or M.D. investigators who seek training in one of the areas of basic biomedical research available at this center. These include biochemistry, immunohistochemistry, tumor cell biology, pharmacology, pharmacodynamics, pediatric hematology-oncology, infectious diseases, and virology and molecular biology.

Journey Fellowship awards are made for up to three years and are based on merit, recommendations and the promise of a productive career in biomedical research.

Application deadline: 1 September 1990
Decission: 15 October 1990
Beginning date: 1 July 1991
Stipend: Highly Competitive

The Journey Fellowship honors the memory of Dr. Leon Journey, a distinguished cell biologist and electron microscopist who served on the faculty of St. Jude Hospital.


For more information and application contact:
Allan Granoff, Ph.D., Deputy Director
St. Jude Children's Research Hospital
P.O. Box 318
Memphis, TN 38101-0318
Phone: (901)522-0301
FAX: (901)527-2270
**Program in Excellence in Molecular Biology of the Cardiovascular System**

**New Investigator Positions**

Molecular Biology of Ion Channels

The NHLBI of the NIH has awarded the University of Cincinnati Medical Center a new program providing unique opportunities for training and research in the Molecular Biology of the Heart and Lung.

Postdoctoral assistant or junior faculty positions are now available in the Component on the Structure and Function of Ion Channel Proteins.

Candidates with molecular genetic skills possessing a Ph.D. and/or M.D. degree, who wish to address problems associated with ion channels of heart, smooth muscle, and brain, are encouraged to apply.

Beginning stipends for recent graduates are at a minimum of $25,000 including benefits, and progresses to $37,000 or higher in final years.

Applicants should submit a C.V. and the names of three references to Dr. Arnold Schwartz, Department of Pharmacology and Cell Biophysics, University of Cincinnati, College of Medicine, 231 Bethesda Ave., Cincinnati, OH 45267–0675. If you wish further information, telephone 513-558-2400. FAX number 513-558-1778.

Equal Opportunity Employer

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**Postdoctoral Research Staff Member**

Lawrence Livermore National Laboratory, one of the nation’s premier research and development organizations, is seeking an environmental scientist for a 2-year postdoctoral appointment.

Requirements include a recent PhD with formal training and experience in microbial ecology and biochemistry that is relevant to investigating the effects of environmental factors on organic contaminant degradation. The successful applicant will interact with a multidisciplinary research team that is investigating the interaction of microbial processes, fluid flow and chemical transport in subsurface environments.

Lawrence Livermore National Laboratory offers a highly competitive benefits package including three weeks vacation during your first year of employment. Interested applicants should send their curriculum vitae to: Earl G. Morell, Professional Employment Division, Lawrence Livermore National Laboratory, P.O. Box 808, L-725, Dept. A90258, Livermore, CA 94550. An equal opportunity employer.

University of California

Lawrence Livermore National Laboratory

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**Schering-Plough Research**

**Senior Scientists**

If applying your expertise to drug discovery is what you have in mind, come to Schering-Plough Research.

Our dedication to pharmaceutical breakthroughs has made Schering-Plough a $3-billion healthcare leader. To maintain our leading edge, we seek accomplished professionals with demonstrated excellence in research. So if you want to apply your knowledge to drug discovery in a dynamic environment, a challenge awaits you at our research facility in Bloomfield, NJ.

At Schering-Plough, you'll be part of the creative force working at the forefront of pharmaceutical discovery. To qualify, you must hold a PhD and 0–3 years’ post-doctoral experience in Molecular Virology or Viral Pathophysiology.

We offer highly competitive salaries and an excellent benefits package. For immediate, confidential consideration, please forward your resume to: Mr. R. Blackburn, Schering-Plough Research, P.O. Box DD-89-54/60, 60 Orange Street, Bloomfield, NJ 07003.

We are an equal opportunity employer.

What you have in mind, we put in action.
IMMUNOLOGIST/ASSOCIATE RESEARCH SCIENTIST

The Surgical Immunology Research Laboratory at the West Haven Veterans Administration (VA) Medical Center is looking for a Ph.D. DIRECTOR to oversee one to three surgical resident trainees and participate in studies of lymphocyte signal transduction, neuroendocrine mediators of immune function, and the effect of immunosuppressives on secondary messengers and activation events. A permanent salary line from Bridgeport Hospital and Federal (full-time position) at West Haven, 5 minutes by shuttle bus to the Yale main campus. Bridgeport Hospital, Yale University, and the West Haven VA Medical Center are Equal Opportunity Employers and applications from women and minorities are encouraged. Send curriculum vitae to: Marvin A. McMillen, M.D., Director, Surgical Intensive Care Unit, West Haven VA Medical Center, West Spring Street, West Haven, CT 06516.

RESEARCH ASSOCIATE, BIOLOGY. Working independently, will carry out experiments analyzing DNA and RNA from mammalian cells using electrophoretic and hybridization techniques, order and monitor laboratory supplies related duties. Requires B.A./B.S. in biology, biochemistry, or related field and 2 to 3 years of laboratory experience working with recombinant DNA standard techniques. Experience working with animals (especially rodents) preferred. Master's degree desirable. Send resume to: Ms. Nila Ross, RESEARCH Human Resources, Tufts University, Medford, MA 02155. Affirmative Action/Equal Opportunity Employer.

CORTECH, INC.

RESEARCH ASSOCIATE, MOLECULAR BIOLOGY. Cortech is a Denver-based pharmaceutical research and development company specializing in the areas of immunology, protein biochemistry, and receptor pharmacology. We are seeking a research associate in the area of molecular biology. The successful candidate will have a B.S. or M.S. and several years of experience in the field as well as be familiar with several of the following techniques: cDNA library construction and screening, DNA sequencing, expression of foreign proteins in bacteria, protein purification, protein characterization (HPLC, gel electrophoresis, immunohistochemical, etc.). CORTECH offers a stimulating environment where a multidisciplinary approach is employed in order to develop new technologies for the treatment of human diseases. CORTECH is an Equal Opportunity Employer and offers an excellent compensation and benefits package including stock options. Please direct inquiries to:

Barbara Kliper, Laboratory Manager
Cortech, Inc.
6840 North Broadway, Suite F
Denver, CO 80221

RESEARCH ASSOCIATE

Stanford University Pathology Department is seeking a Ph.D. experienced in the isolation of mammalian or bacterial proteins. Familiarity with immunohistoassays and/or monoclonal antibody production is desirable, but not necessary. Full time. Both permanent and temporary positions are available. Send curriculum vitae to: Dr. W. Ruelh, Department of Pathology, L235, School of Medicine, Stanford, CA 94305.

UNIVERSITY OF ILLINOIS AT CHICAGO TECHNOLOGY MANAGEMENT POSITION

The University of Illinois at Chicago (UIC) has an immediately opening a MARKETING SPECIALIST who will be responsible for the identification, disclosure, and licensing of university intellectual properties. Experience in technology evaluation and marketing and negotiation of research, development, and licensing agreements is required. Minimum qualifications include an undergraduate degree in a scientific or engineering discipline, an applicable professional or advanced degree, and experience marketing biotechnology or software inventions. Senior level requires at least 5 years of combined experience in related fields of work. Outstanding verbal and written communication skills are essential. Salary is competitive with experience and qualifications. Applications should be received by 7 June 1990 to ensure full consideration. Please send letter of application, complete resume, salary history, and names of three references to: Ms. Amy Levant, Search Coordinator, Office of the Vice Chancellor for Research (MC 672), University of Illinois at Chicago, Box 6998, Chicago, IL 60680. UIC is an Affirmative Action/Equal Opportunity Employer.

VIROLOGIST. Monsanto’s Corporate Research Glycoconjugates function has an opening for a virologist to participate in a program on viral glycoproteins. This position requires a Ph.D. in virology or a closely related discipline and postdoctoral experience. Additional experience in an area of glycochemistry, such as glycoasparagine characterization, is preferred. Interested candidates should submit curriculum vitae and three letters of recommendation to: Monsanto Company, RB5-BGJ, 700 Chesterfield Village Parkway, St. Louis, MO 63198. Equal Opportunity Employer, M/F/H/V.

COURSES AND TRAINING

Merck Sharp and Dohme Research Laboratories Fellowship in Laboratory Animal Medicine at University of Pennsylvania. The Office of Laboratory Animal Resources of the University of Pennsylvania invites applications for POSTGRADUATE TRAINING in laboratory animal medicine. Offered by Merck Sharp and Dohme Research Laboratories. The training will include both a clinical residency in laboratory animal medicine and a master's degree program. Training will encompass 3 years of intensive study divided between (i) academic course work; (ii) clinical, diagnostic, teaching, and administrative experience; and (iii) independent research. This formal training program can be used toward eligibility for certification by the American College of Laboratory Animal Medicine. A stipend of $20,000 to $36,000 will be provided based on the individual's experience. Applicants should be U.S. citizens or permanent residents of the United States and graduates of AVMA-accredited schools of veterinary medicine. For further information, contact: Dr. Harry Rozfirsch, Director, University Laboratory Animal Resources, 102 Bloomsbury, University of Pennsylvania, Philadelphia, PA 19104-6021. The University of Pennsylvania provides Equal Opportunities in Education and Employment.

SITUATIONS WANTED

FIELD BIOLOGIST. Ph.D. Diverse experience as government and manager. Interdisciplinary, terrestrial and marine, pole to pole. Seeks station management. Box 39, SCIENCE.

MOLECULAR MICROBIOLOGIST. Five years of postdoctoral training. Seeking faculty position in intermediate-size university/college with facilities for rDNA research. Box 40, SCIENCE.
Growth Factors and Their Receptors in Cancer: Basic Mechanisms and Therapy
Forty-third Annual Symposium on Fundamental Cancer Research
December 4 - 7, 1990
The Westin Galleria Hotel  •  Houston, Texas

Ernst W. Bertner Award and Memorial Lecture - Donald Metcalf, Royal Melbourne Hospital
Keynote Address - George Todaro, Oncogen

The goals of this Symposium are to review the most exciting research on the basic mechanisms of growth factors and their receptors in cancer and to explore their potential therapeutic applications. Progress related to the biology and normal physiological function and mechanisms of action of growth factors and their receptors in a variety of tissues will be described, as well as the pathophysiology associated with the regulation and expression of these factors in cancer. Individual sessions will focus on specific target tissues. In addition, new models in which to study the role of autocrine, paracrine, and endocrine factors, as well as transcription factors, will be presented. The topic of antigrowth factors and their role in cancer expression and progression will also be discussed.

Additional invited speakers include:
- David Beach, Cold Spring Harbor Laboratory
- Samuel Benchimol, The Ontario Cancer Institute
- Michael Cleary, Stanford University
- Cynthia Dunbar, National Heart, Lung and Blood Institute
- Myrtle Gordon, Chester Beatty Laboratories, England
- Warner Greene, Duke University
- Alan Hall, Chester Beatty Laboratories, England
- Douglas Hanahan, University of California - San Francisco
- Edward Harlow, Cold Spring Harbor Laboratory
- Meenhard Herlyn, The Wistar Institute
- David Housman, Massachusetts Institute of Technology
- Tony Hunter, The Salk Institute
- Tadamitsu Kishimoto, Osaka University
- Michael Klagsbrun, Harvard Medical School
- Joan Massague, Memorial Sloan-Kettering Cancer Center
- John Minna, National Cancer Institute
- Donald Mosier, Medical Biology Institute
- Joseph Schlessinger, New York University Medical Center
- Charles Sherr, St. Jude Children's Research Hospital
- Kendall Smith, Dartmouth Medical School
- Charles Stiles, Harvard Medical School
- Bill Sugden, University of Wisconsin School of Medicine
- Max Wicha, University of Michigan
- Lewis Williams, University of California - San Francisco
- Owen Witte, University of California - Los Angeles

Chairmen
- Albert Deisseroth  •  Jordan Gutterman
- Garth Nicolson

Call for Posters
Abstracts, not exceeding one page, should be typed double-spaced on plain 8.5 x 11 inch paper and must be received no later than October 8, 1990. Participants will be notified of their posters' acceptance by mail.

Wilson S. Stone Memorial Award
Nominations are solicited for the Wilson S. Stone Memorial Award. The award acknowledges outstanding research accomplished by a junior investigator (postdoctoral fellow, or assistant professor for not more than three years). The research should be consistent with the theme of the Symposium. The award consists of a plaque, a $1,000 honorarium, and travel and per diem expenses to attend the Symposium. Deadline for receipt of applications is July 31, 1990.

Abstract submissions and nomination forms for the Stone Award may be requested by phone, 713/792-3391, by FAX 713/790-9492, or by writing:

Dr. Anthony J. Mastromarino, Office of the Vice President for Research, M. D. Anderson Cancer Center - Box 101, 1515 Holcombe Boulevard, Houston, Texas 77030.

Additional Conference Information
Conference Services - HMB 131, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, Texas 77030.
Phone: (713) 792-2222.
Perfect Match™ polymerase enhancer* is an additive formulated to greatly increase the specificity of primer extension reactions (1,2). Primer-template complexes that contain mismatched nucleotides near the 3' terminus of the primer are destabilized by Perfect Match polymerase enhancer (3). However, perfect and near perfect template-primer matches or primers with regions of non-homology at the 5' end are not affected. Thus, the frequency of false priming events is dramatically decreased. Perfect Match polymerase enhancer may be used to minimize false priming events in such applications a cDNA synthesis and primer extension reactions including those involving PCR amplification (4).


Figure 1 shows two examples of in vitro amplification reactions that are significantly enhanced by the addition of Perfect Match polymerase enhancer to the polymerase preparation. Note that in lanes 1 and 2, the desired PCR product cannot be detected unless Perfect Match polymerase enhancer is added to the amplification reaction. In lanes 3 and 4, Perfect Match polymerase enhancer not only increases the intensity of the desired amplification products, but dramatically reduces the background artifacts generated by non-specific priming events.

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